

...setting the standard again and again®

# THERMOMETRY CATALOG

**THERMOCOUPLE** 

RTD

**THERMISTOR** 

**INFRARED** 









# **Dear Valued Customers and Marketing Partners:**

# Welcome to the New Oakton Instruments Thermometry Catalog

For over 18 years, Oakton Instruments has set the standard for innovation and quality in portable and bench instrumentation. From our introduction in 1991 of the reliable, in portable and bench instrumentation. From our introduction in 1991 of the reliable, incorprocessor-based, pocket-sized TempTestr® to our new, powerful 300-Series line of datalogging thermometers, Oakton has met or exceeded user expectations. Oakton remains in the forefront with technological breakthroughs like the USB output available on our new 300-Series meters, as well as with design innovations that permit intuitive, user-friendly operation and allow handheld instruments to easily fit in your hand.

While extending our range of offerings, Oakton continues the tradition of providing a broad selection of easy-to-use products with outstanding value. All Oakton meters are designed and manufactured at an ISO 9001 facility, and meet CE requirements for EMF. Our commitment to deliver accuracy, quality, and reliability at a competitive price makes Oakton a leader in our field.

If you like what you see in this catalog, be sure to visit our Web site at www.4oakton.com, where you'll find Oakton Instruments' complete selection of products, and where you can request additional Oakton catalogs. You'll find the Oakton Instruments Electrochemistry Catalog featuring meters, electrodes, and accessories for pH, ISE, conductivity, dissolved oxygen, and other water quality measurements. You'll also find the Eutech Instruments Product Guide featuring on-line controllers and transmitters for pH, ORP, conductivity, Product Guide featuring on-line controllers and transmitters for pH, ORP, conductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, Product Guide featuring on-line controllers and transmitters for pH, or onductivity, PT or o

Sincerely,

The Oakton Instruments Team

...setting the standard again and again®

# Visit us online: www.4oakton.com

Log on to the Oakton Instruments Web site for product pricing, technical data, and customer assistance:

- Access detailed information on new Oakton products as soon as they become available
- Download product manuals and product specifications for every Oakton instrument
- Search our technical library for application tips based on our most frequently asked questions
- Navigate quickly to the information you need with our newly enhanced Search function
- Find e-mail links to the Oakton team for fast technical assistance
- Access MSDS sheets for Oakton solutions



# **▼** THERMOMETRY



# Measuring Solutions for Your Application

#### **Thermocouple Meters**

Instruments amplify, linearize, and display the millivolt signal generated by the two dissimilar wires of the thermocouple probe. The signal is proportional to the temperature gradient between the measuring and reference junctions. Oakton offers many low-cost, fast-response probes in a wide variety of designs. Handheld probes are ideal for inspection and maintenance. Many types of probes can be permanently installed. Probes resist mechanical shock. Use probe within 2000 feet of the instrument.

#### **Platinum RTD Meters**

These instruments provide excellent accuracy, stability, and repeatability over a wide temperature range. Probes have an element with a characteristic resistance that increases as the temperature increases. Three-wire probe reduces effect of lead-length resistance on measurements, giving a more precise indication of temperature.

#### **Thermistor Meters**

Thermistors exhibit a greater sensitivity and accuracy in the biological range—32 to 212°F (0 to 100°C). Probes encase a ceramic element that generally decreases in resistance as the temperature increases.

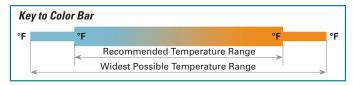
#### **Infrared Thermometers**

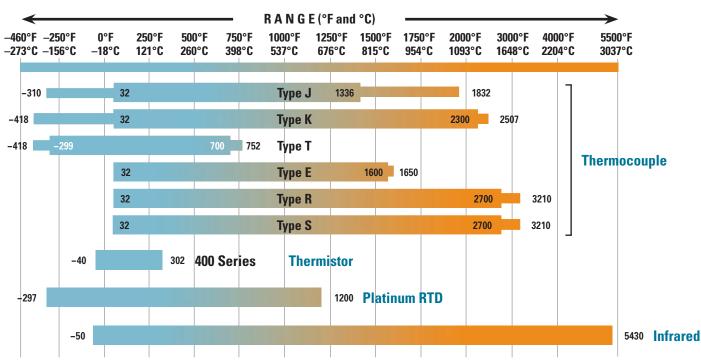
Provide fast response for surface temperatures. Models are available for both close- and far-range measurements.



#### Temperature Instrument Range Guide

The stated accuracy of any temperature measurement device is for the "Recommended Temperature Range" only. The narrow section of the temperature bar represents the widest range the instrument can be used in. Accuracy in this range is not guaranteed. Probe damage may occur at the extreme ends of the temperature range. Temperatures listed below are approximate.





#### **Typical Accuracies**

#### Thermocouple

Type J, K, and E probes: ±1.8 to 7.9°F or ±0.4% of reading above 32°F, whichever is greater Type T probes: ±0.9 to 3.6°F or ±0.4% of reading above 32°F, whichever is greater

Type R and S probes: ±2.5°F or ±0.25% of reading, whichever is greater

Meters: ±0.1 to 1% of reading and ±1.8°F (±1°C)

#### Thermistor

400-series probes: ±0.36°F (±0.2°C) from 32 to 167°F (0 to 75°C) 500-series probes: ±0.2°F (±0.1°C) 700-series probes: ±0.27°F (±0.15°C) Meters: ±0.2 to 0.4°F (±0.1 to 0.2°C)

#### Platinum RTD

Probes:  $\pm 0.2$  to 0.35% of reading Meters:  $\pm 0.1\%$  of reading and  $\pm 1^{\circ}F$  ( $\pm 1^{\circ}C$ )

Infrared: ±1 to 3% of reading

# WHAT'S NEW! V



# Our **Rugged**, Versatile, User-Friendly **Handheld Thermometers**

# Main **Features**

- ▼ Rugged ergonomic housing
- ▼ Simple-to-use automatic field calibration ensures accurate readings
- ▼ Sealed keypad and ABS plastic case meet IP54 standards for splash resistance
- ▼ Min/Max and Hold functions
- ▼ Temperature units in °F or °C

# Quick connections for a variety of probes

- Miniconnectors on thermocouple meters, mini-din on RTD meters, and bayonet on thermistor meters
- Dual-input versions available

**Optional three-way hands-free** 



#### Large, backlit display

- ▼ Custom LCD on basic meters
- Dot-matrix on advanced meter; simultaneously display individual probes and differential readings

#### **USB** output available

 Advanced meters feature computer interface via RS-232

# Menu-driven operation on advanced meters

- Access easy-to-follow setup; intuitive on-screen menus
- Quick review of operations and functions

# Datalogging capabilities available

- ▼ Log up to 2000 points
- Review on the meter at the touch of a key





▼ Flip stand for benchtop use

 Magnet mount; sticks to metal surfaces





#### Optional protective rubber armor

- Protects meter from accidental drops and dings
- Provides added grip in wet environments
- ▼ Built-in flip stand





# THERMOCOUPLE

# **Temp 300 Datalogging** Thermocouple Thermometer

# Our most advanced thermocouple thermometer

#### **Datalogging for up to 2000 points**

▼ Time-and-date stamp for advanced data analysis

#### Menu-driven setup and operation

▼ Detailed on-screen information makes the Temp 300 easy to use

#### T1/T2 function

▼ Take differential temperature measurements with simultaneous display of individual probes

#### **USB** output

▼ Easily transfer stored readings to your computer

#### **Standard miniconnectors**

▼ Choose from a wide variety of probes

#### All push-button operation

▼ For fast, easy use

#### **Automatic field calibration**

▼ Easily performed for either a single- or dual-point calibration for each probe

#### °C/°F/°R or K selectable

#### Minimum and maximum temperature display

▼ Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

#### Temperature offset calibration adjustment

▼ Push-button adjustment for fine-tuning factory calibration

▼ Freezes measurements for convenient reading and recording

#### Auto-off function

▼ Turns off meter after 17 minutes of nonuse to save batteries

#### **Sealed keypad and ABS plastic** case; optional rubber armor

▼ Meet IP54 standards for splash resistance; armor adds protection and features a built-in stand



Protective armor makes the Temp 300 rugged enough for your tough environment

#### **Applications**

General: Great for QC and research lab testing requiring analysis.

Industrial: Troubleshoot and analyze industrial

# Select a probe to match your application

35427-50

See pages 8-13 to see our wide selection of probes.

#### **Specifications**

Mode	Range
Type J	-346 to 3192°F (-210 to 1200°C)
Type K	-418 to 2501°F (-250 to 1372°C)
Type T	-418 to 752°F (-250 to 400°C)
Type E	-418 to 1832°F (-250 to 1000°C)
Type R	32 to 3214°F (0 to 1768°C)
Type S	32 to 3214°F (0 to 1768°C)
Type N	-418 to 2372°F (-250 to 1300°C)
Type B	392 to 3272°F (200 to 1800°C)

Resolution: 0.01 or 0.1°F/°C; auto-ranging to 0.1° above +99.99°

#### Accuracy:

Type J, K, T, E, and N:  $\pm 0.25\%$  of reading  $\pm 2$ °F ( $\pm 1$ °C) below -148°F (-99.9°C), ±0.1% of reading ±0.7°F (±0.4°C) above -238°F (-150°C) Type R, S, and B:  $\pm 0.1\%$  of reading  $\pm 2$ °F ( $\pm 1$ °C)

Datalogging: 2000 real-time readings, with

time-and-date stamp

Display: 4-digit, custom dot matrix display; 1/4" x 1/2" digits, 21/4" x 11/2" backlit viewing area Digital output: USB

Power: three AA batteries (included) or optional AC adapter

Battery life: 400 hours continuous (without use of backlighting)

Probe: two thermocouples; use any J, K, T, E, R, S, N, or B probe with miniconnector (not included)

Dimensions: 4"W x 7"H x 2"D (18 x 10.2 x 5.2 cm) (with protective boot)

Weight: 1.25 lb (0.6 kg)







3



Catalog number	Description	Included
WD-35427-50	Temp 300 datalogging	Meter and batteries
WD-35427-80	Rubber armor	Rubber armor with built-in meter stand
WD-35427-85 Hands-free kit		Multipurpose hanging strap and mounting magnets

FAX Toll Free: 1-866-433-6684 or 1-281-359-0084 www.novatech-usa.com

# THERMOCOUPLE **V**



# Temp 100 Dual-Input Thermocouple Thermometer

# One meter, two inputs—great for differential testing

#### **Differential temperature mode**

 Multidata LCD simultaneously indicates each probe along with the differential reading

# Standard miniconnector accepts four thermocouple types

Use with many widely available probes or order from our selection

#### Store and recall up to 1000 data points

Track critical data, spot trends, or review data at your convenience

#### All push-button operation

▼ For fast, easy use

#### Menu driven setup and operation

▼ Detailed on-screen information makes the Temp 100 easy to use

#### °C/°F selectable

# Minimum and maximum temperature display

 Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

# Temperature offset calibration adjustment

 Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

 Freezes measurements for convenient reading and recording

#### **Auto-off function**

 Turns off meter after 17 minutes of nonuse to save batteries

# Sealed keypad and ABS plastic case; optional rubber armor

 Meet IP54 standards for splash resistance; armor adds protection and features a built-in stand

# Select a probe to match your application

See pages 8–13 to see our wide selection of probes.



35427-40



Optional rubber armor lets you prop meter on your lab bench.

#### **Specifications**

	·
Mode	Range
Type J	−346 to 2192°F (−210 to 1200°C)
Type T	-418 to 752°F (-250 to 400°C)
Type E	-418 to 1832°F (-250 to 1000°C)
Туре К	−418 to 2501°F (−250 to 1372°C)

**Resolution:**  $0.1^{\circ}\text{F/°C}$  between -99.9 to  $999.9^{\circ}$ ,  $1^{\circ}$  below  $-99.9^{\circ}$  and above  $999.9^{\circ}$ 

#### Accuracy

Below  $-148^{\circ}F$  ( $-99.9^{\circ}C$ ):  $\pm 0.25\%$  of reading  $\pm 2^{\circ}F$  ( $\pm 1^{\circ}C$ ) Above  $-148^{\circ}F$  ( $-99.9^{\circ}C$ ):  $\pm 0.1\%$  of reading  $\pm 0.7^{\circ}F$  ( $\pm 0.4^{\circ}C$ )

Datalogging: 1000 points

**Display:** 4-digit LCD,  $2\frac{1}{4}$ " x  $1\frac{1}{2}$ " backlit viewing area

Digital output: USB

Power: three AA batteries (included)

**Battery life**: 400 hours continuous (without the use of backlighting)

**Probe**: one thermocouple; use any J, K, T, or E probe with miniconnector (not included)

Dimensions: 4"W x 7"H x 2"D (18 x 10.2 x 5.2 cm)

(with protective boot) Weight: 1.25 lb (0.6 kg)

#### **Ordering Information**

Catalog number	Description	Included		
WD-35427-40	Temp 100	Meter and batteries		
WD-35427-80 Rubber armor		Rubber armor with built-in meter stand		
WD-35427-85	Hands-free kit	Multipurpose hanging strap and mounting magnets		



# **▼** THERMOCOUPLE

**Temp 10 Thermocouple Thermometers** 

Choose from models for J, K, or T input

#### Standard miniconnectors

▼ Choose from a wide variety of probes

#### All push-button operation

▼ For fast, easy use

#### **Ergonomic design**

▼ Easy to grip for one-handed operation

#### °C/°F selectable

# Minimum and maximum temperature display

 Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

# Temperature offset calibration adjustment

Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

 Freezes measurements for convenient reading and recording

#### **Auto-off function**

▼ Turns off meter after 17 minutes of nonuse to save batteries

#### Sealed keypad and ABS plastic case

Meet IP54 standards for splash resistance

#### **Optional rubber armor**

Protects meter; features a built-in stand

# Select a probe to match your application

See pages 8–13 to see our wide selection of probes.



#### **Specifications**

Model	Temp 10J	Temp 10K	Temp 10T
Probe	One type J	One type K	One type T
Range	-346 to 2192°F (-210 to 1200°C)	-418 to 2501°F (-250 to 1372°C)	-418 to 752°F (-250 to 400°C)
Resolution	0.1°F/C between –199.9° and 999.9°; 1° below –199.9° and above 999.9°		
Accuracy	Below –238°F (–150°C): ±0.25°C		

**Display:** 4-digit LCD (6 x 15 mm digits), viewing area 58 x 40 mm (backlit)

**Power:** three AA batteries (included) or optional AC adapter

Battery life: 700 hours continuous (without use of backlighting)

**Dimensions:** 4"W x 7"H x 2"D (18 x 10.2 x 5.2 cm)

5

(with protective boot) **Weight:** 1.25 lb ( 0.6 kg)

#### **Ordering Information**

Catalog number	Description	Included
WD-35427-00	Temp 10J	Meter and batteries
WD-35427-10	Temp 10K	Meter and batteries
WD-35427-20	Temp 10T Meter and batteries	
WD-35427-80	Rubber armor	Rubber armor with built-in meter stand
WD-35427-85	Hands-free kit	Multipurpose hanging strap and mounting magnets

# THERMOCOUPLE **V**



# Acorn® Temp JKT Thermocouple Thermometer

# One meter—three thermocouple types

#### Standard miniconnector

▼ Use with many widely available probes or order from our selection

#### All push-button operation

▼ For fast, easy use

#### **Compact size**

▼ Fits right in your pocket—take your Oakton Temp meter anywhere!

#### °C/°F selectable

# Minimum and maximum temperature display

 Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

# Temperature offset calibration adjustment

▼ Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

 Freezes measurements for convenient reading and recording

#### **Auto-off function**

 Turns off meter after 17 minutes of nonuse to save batteries

#### **Protective rubber armor**

Protects meter; features a built-in stand

#### **Applications**

**General:** Ideal for any application that requires measuring/monitoring the temperature of any liquid, solid, semisolid, or gel.

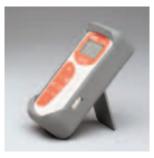
**Educational:** An ideal student thermometer—select °C or °F with the push of a button, and avoid dangers from broken glass or mercury spillage.

# Select a probe to match your application

See pages 8–13 to see our wide selection of probes.



Miniconnector on side of meter for fast probe connections



Rubber armor features built-in stand



35627-00

#### **Specifications**

•	•
Mode	Range
Type J	−328 to 1832°F (−200 to 1000°C)
Туре К	-418 to 2501°F (-250 to 1372°C)
Type T	-418 to 752°F (-250 to 400°C)

**Resolution:**  $0.1^{\circ}F/^{\circ}C$  from -99.9 to 299.9 (°F or °C);  $1^{\circ}F/^{\circ}C$  outside this range

Accuracy:  $\pm 0.25\%$  of reading plus 2°F (1°C) for temp  $\leq 99.9$ °F/°C,  $\pm 0.25\%$  of reading plus 0.9°F (0.5°C) for temp  $\geq 99.9$ °F/°C

Display: single-line LCD

**Power:** four 1.5 V AAA batteries (included), for >200 hours continuous use

**Probe:** one thermocouple; use any type J, K, or T thermocouple probe with miniconnector (not included)

**Dimensions:** 5.5" x 2.7" x 1.3" (14 x 7 x 3.5 cm)

Weight: 0.9 lb (0.4 kg)

#### **Ordering Information**

Catalog number	Description	Included
WD-35627-00	Acorn Temp JKT	Meter, rubber armor, and batteries
WD-85000-00	Certified meter kit	Meter, general-purpose probe (08516-55), NIST-traceable certification, rubber armor, and batteries



# **▼** THERMOCOUPLE

# Acorn® Basic K Thermocouple Thermometer

# Our simplest thermocouple thermometer

#### Standard Type K miniconnector

▼ Type K probes provide widest temperature range

#### All push-button operation

▼ For fast, easy use

#### **Compact size**

▼ Fits right in your pocket—take your Oakton Temp meter anywhere!

#### °C/°F selectable

# Minimum and maximum temperature display

 Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

# Temperature offset calibration adjustment

Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

 Freezes measurements for convenient reading and recording

#### **Auto-off function**

 Turns off meter after 17 minutes of nonuse to save batteries

#### **Optional rubber armor**

Protects meter; features a built-in stand

#### **Applications**

**General:** Ideal for any application that requires measuring/monitoring the temperature of any liquid, solid, semisolid, or gel.

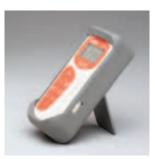
**Industrial**: Use in photo developing, chemical, and plating industries.

# Select a probe to match your application

See pages 8–13 to see our wide selection of probes.



Miniconnector on side of meter for fast probe connections



Optional rubber armor features built-in stand



93000-00

#### **Specifications**

Range: -418 to 2501°F (-250 to 1372°C)

**Ordering Information** 

Accuracy: ±0.25% of reading plus 0.9°F (0.5°C) above -99.9°F/C, ±0.25% of reading plus 2°F (1°C) below -99.9°F/C

**Resolution:** 0.1°F/C from -99.9 to 299.9°F/C; 1°F/C outside this range

Display: 4-digit LCD with 5/8" (14 mm) high numerals

Display update rate: every 0.5 second
Power: four AAA batteries (included)
Probe: one type K thermocouple probe with
miniconnector (not included)
Dimensions: 5.7" x 2.7" x 1.3" (14.5 x 7 x 3.5 cm)

Weight: 0.9 lb (0.4 kg)







Catalog number	Description	Included	
WD-93000-00	Acorn Temp Basic K	Meter, rubber armor, and batteries	
WD-35627-80 Rubber armor		Rubber armor with built-in meter stand	

# THERMOCOUPLE V



# Thermocouple Selection Guide

#### **Thermocouple Probe Junction Types**

Sheaths with small diameters have faster response times; sheaths with larger diameters have longer life and are better for measuring higher temperatures.

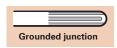
**Exposed Junction** has the fastest response time—ideal for measuring rapid temperature changes. Clear coating on most models provides a humidity barrier for the thermocouple. Do not use with corrosive fluids or atmospheres.

**Ungrounded Junction** has a welded junction insulated from the protective sheath and is electrically isolated. Longer response time; use for conductive solutions or where isolation of the measuring circuitry is required.

**Grounded Junction** has a junction welded to tip of sheath. Wires are completely sealed from contaminants. Good response time.







#### **Probe Sheath/Body Materials**

Inconel® 600 Sheath is ideal for severely corrosive environments and elevated temperatures. Resists progressive oxidation. Maximum operating temperature: 2100°F (1148°C) continuous; 2500°F (1371°C) intermittent.

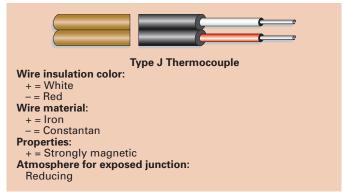
**304 SS Sheath** is for general-purpose use, is corrosion-resistant, and good for food service and biological applications. Maximum operating temperature: 1650°F (898°C) continuous; 2550°F (1398°C) intermittent.

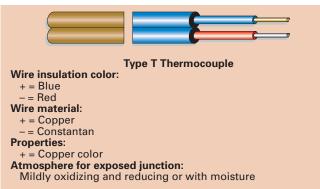
**316 SS Sheath** has higher corrosion resistance than 304 SS. Withstands some strong acids. Maximum operating temperature: 1650°F (898°C) continuous; 2500°F (1371°C) intermittent.

SS Sheath with Coating of PTFE or PFA with grounded junction is ideal with corrosive liquids and atmospheres. Longer response time. Temperatures to 500°F (260°C).

Polymer Body Probes are available in a variety of polmyers including Kapton® and PTFE. These provide excellent flexibility and often good chemical resistance. Be sure to consult a chemical compatibility table when selecting a probe for your application.

#### **Physical Characteristics of Thermocouples**



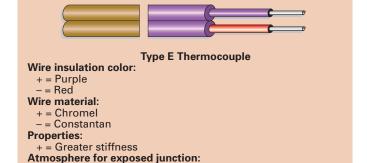


# Type K Thermocouple Wire insulation color: + = Yellow - = Red Wire material: + = Chromel - = Alumel Properties:

+ = Moderately magnetic

Atmosphere for exposed junction:

Clean oxidizing



#### **General Considerations**

**Extend Your Thermocouples** up to 2000 feet without signal loss. Extension wire must be the same type as the thermocouple.

**System Error** becomes important when you select a probe and meter to make a complete temperature measurement system. For example: a meter has an accuracy of  $\pm 0.7^{\circ}$ F; probe error for the type T probe with metal sheath, straight cable, and stripped ends will have an error limit of  $\pm 1.8^{\circ}$ F at  $400^{\circ}$ F. Therefore, the probemeter system accuracy will be  $(\pm 0.7) + (\pm 1.8) = \pm 2.5^{\circ}$ F at  $400^{\circ}$ F.

**NIST Traceability** is required for many applications. In order to make an item traceable to NIST standards, the item and the standard are exposed to the same conditions, the readings are noted, and the difference between the readings is recorded on a NIST certificate. When taking future readings with the item, the value on the certificate must be added or subtracted from the measured value.

Vacuum, inert mildly oxidizing or reducing

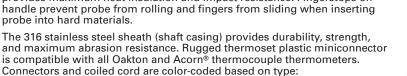


# THERMOCOUPLE

# **General-Purpose Probes**

# Stainless steel sheaths provide good chemical resistance and fast thermal response

These thermocouple probes were designed to measure any general-purpose or liquid immersion application. All thermocouple probes include a 5-ft PVC coiled cord with strain relief that protects from repeated flexing and tugging. Ergonomic, easy-grip 5"L glass-filled nylon handle (unless noted below) provides maximum heat insulation and impact resistance. Fingerstops on handle prevent probe from rolling and fingers from sliding when inserting







Miniconnector

Standard nylon handle

General-purpose probe 08516-55

#### **Specifications & Ordering Information**

type J black, type K yellow, and type T blue.

Catalog number	Туре	Temperature range	Features	Tip length	Dimensions*
Standard probes					
WD-08517-55	J	-310 to 1400°F (-190 to 760°C)	Junction: grounded	5"	
WD-08516-55	K	-418 to 1650°F (-250 to 899°C)	Response time: 15 sec (liquids)		
WD-08500-55	Т	-418 to 752°F (-250 to 400°C)	316 SS sheath; nylon handle		Tin Ionath (F!! 12!! av 24!!)
WD-93756-03	J	-310 to 1400°F (-190 to 760°C)		12"	Tip length (5", 12", or 24")
WD-93756-23	K	-418 to 1650°F (-250 to 899°C)			0.5"
WD-93756-63	Т	-418 to 752°F (-250 to 400°C)			
WD-93756-04	J	-310 to 1400°F (-190 to 760°C)		24"	└ 0.093" dia tip
WD-93756-24	K	-418 to 1650°F (-250 to 899°C)			
WD-93756-44	Т	-418 to 752°F (-250 to 400°C)			
Low-cost probes					
WD-08439-60	J	-310 to 1400°F (-190 to 760°C)	Junction: grounded	4.5"	4.5" — 1.25" —
WD-08439-62	K	-418 to 1650°F (-250 to 899°C)	Response time: 30 sec (liquids)		1.3
WD-08439-64	Т	-418 to 752°F (-250 to 400°C)	304 SS sheath; PVC short handle		A CONTRACTOR OF THE PERSON NAMED IN
					0.155" dia
					0.75" d
Small-diameter st	andard	probes			
WD-08505-55	J	-310 to 1300°F (-190 to 704°C)	Junction: grounded	4"	
WD-08505-56	K	-418 to 1500°F (-250 to 816°C)	Response time: 10 sec		4"
WD-08505-57	Т	-418 to 650°F (-250 to 343°C)	316 SS sheath; nylon handle		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
					0.063" dia
All stainless steel	probes				
WD-93600-02	J	-310 to 1400°F (-190 to 760°C)	Junction: grounded	8"	
WD-93600-22	K	-418 to 1650°F (-250 to 899°C)	Response time: 30 sec		8" —
WD-93600-42	Т	-418 to 752°F (-250 to 400°C)	316 SS sheath; 316 SS handle		
					0.125" dia
					SS har

<sup>\*</sup>Overall probe sheath lengths may vary up to ±0.25".



#### Ensure the accuracy of your thermocouple probe, meter, or system!

Calibration to a NIST-traceable standard helps you meet ISO, FDA, USDA, and EPA guidelines. Our A2LA-accredited metrology laboratory will pretest and calibrate your thermocouple equipment. Service includes NIST-traceable calibration certificate with before and after test data at four temperature test points. See pages 30-31 for ordering information.

9

# THERMOCOUPLE 🔻



**Penetration and Air/Gas Probes** 

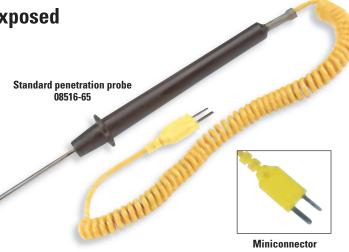
Spear tips make semisolid testing easy; exposed junctions with perforated shields provide fast response to flowing air

Probes include a 5-ft PVC coiled cord with strain relief that protects from repeated flexing and tugging. Ergonomic, easy-grip 5"L glass-filled nylon handle (unless noted below) provides maximum heat insulation and impact resistance. Fingerstops on handle prevent probe from rolling and fingers from sliding when inserting probe into hard materials.

The 316 stainless steel sheath (shaft casing) provides durability, strength, and maximum abrasion resistance. Rugged thermoset plastic miniconnector is compatible with all Oakton and Acorn® thermocouple thermometers. Connectors and coiled cord are color-coded based on thermocouple type: type J black, type K yellow, and type T blue.

A Penetration Probes offer a pointed tip style for penetration into hard and semisolid materials. Sturdy stainless steel tip casing prevents tip from bending when inserting.

☑ Air/Gas Probes are designed with a perforated shield which allows air and other gases to flow into the sensor for quick readings. Metal shield also absorbs radiated heat and minimizes sensor error. Our sensors are encased in ceramic mineral (MGO) insulation to provide stability, and shock and vibration resistance.





Standard nylon handle

#### **Specifications & Ordering Information**

Catalog number	Type	Temperature range	Features	Tip length	Dimensions
A Penetration prol	oes				
Standard probes					
WD-08517-65	J	-310 to 1400°F (-190 to 760°C)	Junction: grounded	5"	
WD-08516-65	K	-418 to 1650°F (-250 to 899°C)	Response time: 25 sec (liquids)		
WD-08500-65	T	-418 to 752°F (-250 to 400°C)	304 SS sheath; nylon handle		
WD-93601-22	J	-310 to 1400°F (-190 to 760°C)	Junction: grounded	12"	Tip length (5, 12, or 24")
WD-93601-24	K	-418 to 1652°F (-250 to 900°C)	Response time: 50 sec		other lands and the same of th
WD-93601-26	T	-418 to 700°F (-250 to 371°C)	316 SS sheath; nylon handle		0.156" dia
WD-93601-42	J	-310 to 1400°F (-190 to 760°C)	Junction: grounded	24"	0.130 ulu
WD-93601-44	K	-418 to 1652°F (-250 to 900°C)	Response time: 50 sec		
WD-93601-46	T	-418 to 550°F (-250 to 287°C)	316 SS sheath; nylon handle		
Small-diameter pro	bes with	hypodermic tip		•	
WD-93601-02	J	-310 to 1300°F (-190 to 704°C)	Junction: grounded	4"	
WD-93601-04	K	-418 to 1500°F (-250 to 816°C)	Response time: 15 sec		4"
WD-93601-06	T	-418 to 650°F (-250 to 343°C)	316 SS sheath; nylon handle		
					0.063" dia
Low-cost probes				_	
WD-08439-80	J	-310 to 1400°F (-190 to 760°C)	Junction: grounded	4.5"	2.5" — 1.25" —
WD-08439-82	K	-418 to 1650°F (-250 to 899°C)	Response time: 25 sec (liquids)		2.3
WD-08439-84	T	-418 to 752°F (-250 to 400°C)	316 SS sheath; PVC short handle		
					└─ 0.125" dia
B Air/gas probes		I			
Standard probes					
WD-08517-75	J	-310 to 1000°F (-190 to 537°C)	Junction: exposed; isolated	8.5"	8.5"
WD-08516-75	K	-418 to 1000°F (-250 to 537°C)	Response time: 225 s at 5 m/s airflow		1.25"
WD-08500-75	T	-418 to 1000°F (-250 to 537°C)	316 SS sheath and radiation shield		
					└ 0.25" dia └ 0.156" dia
Low-cost probes					·
WD-08439-90	J	-310 to 572°F (-190 to 300°C)	Junction: exposed; isolated	5"	E"
WD-08439-92	K	-418 to 572°F (-250 to 300°C)	Response time: 225 s at 5 m/s airflow		0.188" —
WD-08439-94	T	-418 to 572°F (-250 to 300°C)	304 SS sheath and SS wire coil		dia
					0.5" — 0.125" dia



# THERMOCOUPLE

# **Surface Probes**

**Surface ground junction ensures junction senses** temperature of surface, not surrounding atmosphere

Surface probes offer dual spring tips to provide positive contact with flat or slightly irregular surfaces. Include a 5-ft PVC coiled cord with strain relief that protects from repeated flexing and tugging. Ergonomic, easy-grip 5"L glass-filled nylon handle (unless noted below) provides maximum heat insulation and impact resistance. Fingerstops on handle prevent probe from rolling and fingers from sliding when inserting probe into hard materials.

The 316 stainless steel sheath (shaft casing) provides durability, strength, and maximum abrasion resistance. Rugged thermoset plastic miniconnector is compatible with all Oakton and Acorn® thermocouple thermometers. Connectors and cord are colorcoded based on thermocouple type: type J black, type K yellow, and type T blue.

A.B.C Standard surface probes feature ceramic tips to ensure excellent thermal contact. D Flat-leaf probes facilitate insertion into the openings. 

Adhesive probes make it easy to monitor surface temperatures over time.



#### **Specifications & Ordering Information**

Catalog number	Туре	Temperature range	Features	Tip length	Dimensions
A Standard straigh	t probes				
WD-08517-60	J	-310 to 1200°F (-190 to 649°C)	Junction: exposed; isolated	10"	2.0"—
WD-08516-60	K	-418 to 1200°F (-250 to 649°C)	Response time: 30 sec		— Z.O —
WD-08500-60	Т	-418 to 650°F (-250 to 343°C)	Aluminum housing; nylon handle		
B Low-cost probes					
WD-08439-70	J	-310 to 1200°F (-190 to 649°C)	Junction: exposed; isolated	4.5"	4.5"
WD-08439-72	K	-418 to 1200°F (-250 to 649°C)	Response time: 30 sec		0.5"
WD-08439-74	Т	-418 to 700°F (-250 to 371°C)	Aluminum housing; no handle		dia
C 90°-angle probes	: ideal for	hard-to-reach areas.		•	
WD-08517-64	J	-310 to 1200°F (-190 to 649°C)	Junction: exposed; isolated	2"	0.188"
WD-08516-64	K	-418 to 1200°F (-250 to 649°C)	Response time: 30 sec		dia 6.0"————
WD-08500-64	Т	-418 to 650°F (-250 to 343°C)	Aluminum housing; nylon handle		2.0" — 0.63" dia
<b>□</b> Flat-leaf probes:	flexible fo	r positive contact in hard-to-reach	areas; use between metal plates or on	other surfaces.	
WD-08518-50	J	-310 to 1400°F (-190 to 760°C)	Junction: grounded	4.5"	- 0.212"
WD-08518-60	K	-418 to 1650°F (-250 to 900°C)	Response time: 5 sec		_ 0.312"
WD-08518-70	T	-418 to 752°F (-250 to 400°C)	Nylon handle		4.5"
<b>囯</b> Self-adhesive pr	obes: adhe	ere to most surfaces, Kapton®-insul	ated wire and industrial adhesives for I	nigh temperature an	d long-term durability.
WD-08519-50	J	-310 to 760°F (-190 to 404°C)	Junction: grounded	_	_ ├── 2.0" ──
WD-08519-52	K	-418 to 760°F (-250 to 404°C)	Response time: 5 sec		
WD-08519-54	Т	-418 to 760°F (-250 to 404°C)	No handle; 5-ft L wire		1.0"

# THERMOCOUPLE 🔻



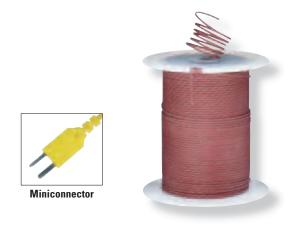
# Flexible Insulated-Wire Probes

# Choose from a variety of coating materials to match your application

Flexible insulated-wire probes include a straight insulated cable without a handle. These probes can be easily bent and mounted on walls or around corners.

PVC-insulated probes provide economical options with good flexibility. The PTFE- and FEP-insulated probes are for use with acids and chemicals. Kapton®-insulated probes exhibit an excellent balance of physical, chemical, and electrical properties over a wide temperature range, particularly at unusually high temperatures. Fiberglassinsulated probes offer excellent electrical insulation properties and can be exposed to extremely high temperatures.

Rugged thermoset plastic miniconnector is compatible with all Oakton and Acorn® thermocouple thermometers. Connectors and cord are color-coded based on thermocouple type: type J black, type K yellow, and type T blue.



#### **Specifications & Ordering Information**

0.1	_				P: .
Catalog number	Туре	Temperature range	Features	Tip length	Dimensions
PVC-insulated pro	bes with e	poxy-coated tip, 20-gauge (0.032" d	ia) wire; 10-ft L; short-term immersible.		
WD-08466-02	J	-310 to 221°F (-190 to 105°C)	Junction: ungrounded	_	0.090" x 0.155" outer dia
WD-08466-04	K	-418 to 221°F (-250 to 105°C)	Response time: 25 sec		
WD-08466-06	T	-418 to 221°F (-250 to 105°C)			
					— 0.166" dia
Fine-gauge PTFE-i	nsulated p	orobe, 0.025" outer dia; 3-ft L; implan	t in semisolids. Includes five 18-gauge i	needles.	
WD-08506-75	Т	-418 to 302°F (-250 to 150°C)	Junction: ungrounded	_	0.025" dia
			Response time: 0.5 sec		
FEP-insulated prob	es with e	poxy-coated junction, 24-gauge (0.0	20" dia) wire; 10-ft L; long-term immersi	ble.	
WD-08466-81	J	-310 to 400°F (-190 to 204°C)	Junction: ungrounded	_	0.091" dia 0.056" x 0.093" outer dia
WD-08466-82	K	-418 to 400°F (-250 to 204°C)	Response time: 15 sec		
WD-08466-83	T	-418 to 400°F (-250 to 204°C)			
Kapton-insulated p	<b>robe</b> , 24-g	auge (0.020" dia) wire; 10-ft L; ideal	for multipoint temperature measureme	nts.	
WD-08517-90	J	-310 to 600°F (-190 to 315°C)	Junction: exposed	_	0.038" x 0.063" outer dia
			Response time: 15 sec		
Kapton-insulated p	robes, 30-	gauge (0.010"dia) wire; 5-ft L; ideal f	or checking food temperatures. Pack o	f six.	
WD-08505-87	J	-310 to 759°F (-190 to 404°C)	Junction: exposed	_	0.052" outer dia
WD-08505-86	K	-418 to 759°F (-250 to 404°C)	Response time: 0.5 sec		
WD-08505-85	T	-418 to 759°F (-250 to 404°C)			
Fiberglass-insulat	ed probes,	24-gauge (0.020" dia) wire; 10-ft L. U	Jse for high-temperature measurement	S.	
WD-08512-81	J	-310 to 900°F (-190 to 482°C)	Junction: exposed	_	- 0.052" x 0.081" outer dia
WD-08512-82	K	-418 to 900°F (-250 to 482°C)	Response time: 15 sec		
WD-08512-83	T	-418 to 750°F (-250 to 400°C)			

#### **Thermocouple Wires**

12

Wires come in 24- or 20-gauge for fabricating your own probes or extension cables (meets ANSI and ASTM standards). PVC/PVC wire is extension-grade wire.



Tona	Insulation	24-gauge wire	20-gauge wire	
Туре		Catalog number	Catalog number	
J		WD-08541-06	WD-08541-16	
K	PVC	WD-08541-09	WD-08541-20	
T		WD-08541-12	WD-08541-25	

FAX Toll Free: 1-866-433-6684 or 1-281-359-0084 www.novatech-usa.com



# ▼ THERMOCOUPLE

# **Specialty Probes**

# Designed for food, science, electronics, and HVAC applications

Catalog number	Туре	Temperature range	Features	Dimensions*
-		designs. For more food probes, see th	ne stainless steel probes on page 9	
	<del></del>		processing applications. Include 4.5"L stainless	s steel handle and 4-ft SS-armored cable
WD-93600-02	J	-310 to 1400°F (-190 to 760°C)	Junction: grounded	Steed Hallard and Title of armored duble.
WD-93600-02 WD-93600-22	K	-310 to 1400 F (-190 to 760 C) -418 to 1650°F (-250 to 899°C)	Response time: 30 sec	8"
	T	-418 to 752°F (-250 to 400°C)	316 SS sheath; miniconnector; SS handle	
WD-93600-42	'	-418 to 752°F (-250 to 400°G)	316 SS sheath; miniconnector; SS handle	└── 0.125" dia
Small-diameter p	robes with	miniature stainless steel handles, 8"L	Ideal for checking food temperatures. Include	5-ft coiled cable.
WD-08505-61	J	-310 to 1300°F (-190 to 704°C)	Junction: grounded	8"
WD-08505-62	K	-418 to 1500°F (-250 to 816°C)	Response time: 10 sec	8 2.25
WD-08505-63	T	-418 to 650°F (-250 to 343°C)	316 SS sheath; miniconnector; SS handle	
Food-service pro	bes with hy	   <mark>rpodermic tip,</mark> 4"L. Include 4-ft straight	armored cable.	
WD-93607-20	J	-310 to 700°F (-190 to 371°C)	Junction: grounded	
WD-93607-22	K	-418 to 700°F (-250 to 371°C)	Response time: 10 sec	4" 1.5"
WD-93607-24	T	-418 to 700°F (-250 to 371°C)	316 SS sheath and handle; miniconnector	
VVD-33007-24	'	-410 to 700 1 (-230 to 371 G)	310 33 Sheath and handle, milliconnector	└ 0.063" dia
Science needle t	<u> </u>			
mall-diameter p		hypodermic tip, 4"L. Include 5-ft coiled	d cable.	
WD-93601-02	J	-310 to 1300°F (-190 to 704°C)	Junction: grounded	4"
WD-93601-04	K	-418 to 1500°F (-250 to 816°C)	Response time: 15 sec	5.5
WD-93601-06	T	-418 to 650°F (-250 to 343°C)	316 SS sheath; miniconnector;	
			glass-filled polypropylene handle	0.063" dia
lypodermic prob	es, 4"L. Incl	ude 4-ft straight PVC cable and benda	ble sheath.	
WD-08116-65	J	-310 to 700°F (-190 to 371°C)	Junction: grounded	
WD-08117-65	K	-418 to 700°F (-250 to 371°C)	Response time: 10 sec	4" 1.5"
WD-08113-65	T	-418 to 700°F (-250 to 371°C)	316 SS sheath and handle; miniconnector	
112 00110 00		110 10 700 1 ( 200 10 071 07	oro oo oncata ana nanato, minocimotos	
				└ 0.063" dia
Electronics small	surface pr	   obes—fast response and minimal dam	nages to components.	└ 0.063" dia
		   obes—fast response and minimal dam   Small diameter is ideal for confined ar	· · · · · · · · · · · · · · · · · · ·	└── 0.063" dia
Small-diameter p	robes, 8"L.	Small diameter is ideal for confined are	· ·	1
Small-diameter p	robes, 8"L.	Small diameter is ideal for confined are	eas.	ble.
<b>Small-diameter p</b> Exposed junction	robes, 8"L. is isolated	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C)	eas. ng with ceramic support. Include 5-ft coiled ca Junction: exposed; isolated	1
Small-diameter p Exposed junction WD-08517-62	robes, 8"L. is isolated J	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C)	eas. ng with ceramic support. Include 5-ft coiled ca  Junction: exposed; isolated Response time: 15 sec	ble.
Small-diameter p Exposed junction WD-08517-62 WD-08516-62	robes, 8"L. is isolated J K	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C)	eas. ng with ceramic support. Include 5-ft coiled ca Junction: exposed; isolated	ble.
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62	robes, 8"L. is isolated J K	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C)	eas. ng with ceramic support. Include 5-ft coiled ca  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing;	ble.
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes	robes, 8"L.; is isolated J K T	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)	eas. ng with ceramic support. Include 5-ft coiled ca  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing;	ble.
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes	robes, 8"L.; is isolated J K T	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)	eas. ng with ceramic support. Include 5-ft coiled cal Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle	ble.
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes Dropping/magnet	robes, 8"L. is isolated  J  K  T	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)	eas. ng with ceramic support. Include 5-ft coiled ca  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle	ble.
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes Dropping/magnet WD-08519-86	robes, 8"L. is isolated  J  K  T	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C) 1.5"L. Attach magnetic probe to any fla	eas. ng with ceramic support. Include 5-ft coiled cal Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed	ble.
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86	robes, 8"L. is isolated of the state of the	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C) 1.5"L. Attach magnetic probe to any fla -310 to 1200°F (-190 to 649°C) -418 to 750°F (-250 to 649°C) -418 to 750°F (-250 to 399°C)	eas. ng with ceramic support. Include 5-ft coiled cal Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed Response time: 30 sec	ble.
Small-diameter p exposed junction WD-08517-62 WD-08516-62 WD-08500-62 WD-08500-62 WD-08519-86 WD-08514-86 WD-08525-86 General-purpose	robes, 8"L. is isolated  J  K  T  ic probes,  J  K  T  air/gas pro	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C) 1.5"L. Attach magnetic probe to any fla -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 750°F (-250 to 399°C) bes; 8.5"L; for general-purpose air tem	eas. ng with ceramic support. Include 5-ft coiled cal Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed Response time: 30 sec Aluminum housing; miniconnector	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86 General-purpose WD-08517-75	robes, 8"L. is isolated  J  K  T  ic probes,  J  K  T  air/gas pro  J	Small diameter is ideal for confined and from 316 SS shaft and aluminum housi    -310 to 1200°F (-190 to 649°C)    -418 to 1200°F (-250 to 649°C)    -418 to 650°F (-250 to 343°C)    1.5"L. Attach magnetic probe to any flator    -310 to 1200°F (-190 to 649°C)    -418 to 1200°F (-250 to 399°C)    -418 to 750°F (-250 to 399°C)    -418 to 750°F (-190 to 537°C)	eas. ng with ceramic support. Include 5-ft coiled ca  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  perature measurement. Includes 5-ft coiled ca Junction: exposed; isolated	ble.    1.5"   6
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86 General-purpose WD-08517-75 WD-08516-75	robes, 8°L. is isolated  J K T  ic probes, J K T  air/gas pro J K	Small diameter is ideal for confined and from 316 SS shaft and aluminum housi    -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 650°F (-250 to 343°C)  1.5"L. Attach magnetic probe to any flat    -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 750°F (-250 to 399°C)  bes; 8.5"L; for general-purpose air tem    -310 to 1000°F (-190 to 537°C)   -418 to 1000°F (-250 to 537°C)	eas. ng with ceramic support. Include 5-ft coiled cal Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  nperature measurement. Includes 5-ft coiled cal Junction: exposed; isolated Response time: 225 s at 5 m/s airflow	ble.    1.5"   6.5"   6.5"     0.188"   0.25" dia   0.125" dia     d over fiberglass-insulated wire.    1" dia
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86 General-purpose WD-08517-75	robes, 8"L. is isolated  J  K  T  ic probes,  J  K  T  air/gas pro  J	Small diameter is ideal for confined and from 316 SS shaft and aluminum housi    -310 to 1200°F (-190 to 649°C)    -418 to 1200°F (-250 to 649°C)    -418 to 650°F (-250 to 343°C)    1.5"L. Attach magnetic probe to any flator    -310 to 1200°F (-190 to 649°C)    -418 to 1200°F (-250 to 399°C)    -418 to 750°F (-250 to 399°C)    -418 to 750°F (-190 to 537°C)	eas. ng with ceramic support. Include 5-ft coiled ca  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  perature measurement. Includes 5-ft coiled ca Junction: exposed; isolated	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62  HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86 General-purpose WD-08517-75 WD-08516-75 WD-08500-75	robes, 8"L. is isolated  J K T  ic probes,  J K T  air/gas pro J K T	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi  -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)  1.5"L. Attach magnetic probe to any fla -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 750°F (-250 to 399°C)  bes; 8.5"L; for general-purpose air tem -310 to 1000°F (-190 to 537°C) -418 to 1000°F (-250 to 537°C) -418 to 1000°F (-250 to 537°C)	eas. ng with ceramic support. Include 5-ft coiled ca  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  perature measurement. Includes 5-ft coiled ca  Junction: exposed; isolated Response time: 225 s at 5 m/s airflow 316 SS sheath and radiation shield; miniconnector; nylon handle  t plates, furnaces, and molds.	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62  HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86 General-purpose WD-08517-75 WD-08516-75 WD-08500-75	robes, 8"L. is isolated  J K T  ic probes,  J K T  air/gas pro J K T	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi  -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)  1.5"L. Attach magnetic probe to any fla -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 750°F (-250 to 399°C)  bes; 8.5"L; for general-purpose air tem -310 to 1000°F (-190 to 537°C) -418 to 1000°F (-250 to 537°C) -418 to 1000°F (-250 to 537°C)	eas. ng with ceramic support. Include 5-ft coiled cal Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  nperature measurement. Includes 5-ft coiled cal Junction: exposed; isolated Response time: 225 s at 5 m/s airflow 316 SS sheath and radiation shield; miniconnector; nylon handle	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62  HVAC probes Dropping/magnet WD-08519-86 WD-08519-86 WD-08525-86 General-purpose WD-08517-75 WD-08516-75 WD-08500-75	robes, 8"L. is isolated  J K T  ic probes,  J K T  air/gas pro J K T	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi  -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)  1.5"L. Attach magnetic probe to any fla -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 750°F (-250 to 399°C)  bes; 8.5"L; for general-purpose air tem -310 to 1000°F (-190 to 537°C) -418 to 1000°F (-250 to 537°C) -418 to 1000°F (-250 to 537°C)	eas. ng with ceramic support. Include 5-ft coiled ca  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  perature measurement. Includes 5-ft coiled ca  Junction: exposed; isolated Response time: 225 s at 5 m/s airflow 316 SS sheath and radiation shield; miniconnector; nylon handle  t plates, furnaces, and molds.	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62  HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86 General-purpose WD-08516-75 WD-08500-75  Standard straight Exposed junction	robes, 8"L. is isolated  J K T  ic probes, J K T  air/gas pro J K T	Small diameter is ideal for confined arifrom 316 SS shaft and aluminum housi  -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)  1.5°L. Attach magnetic probe to any fla -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 700°F (-250 to 399°C)  bes; 8.5°L; for general-purpose air ten -310 to 1000°F (-250 to 537°C) -418 to 1000°F (-250 to 537°C) -418 to 1000°F (-250 to 537°C)  "L. Use to monitor such surfaces as ho from 316 SS shaft and aluminum housi	eas.  ng with ceramic support. Include 5-ft coiled cai  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid  Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  sperature measurement. Includes 5-ft coiled cai  Junction: exposed; isolated Response time: 225 s at 5 m/s airflow 316 SS sheath and radiation shield; miniconnector; nylon handle  t plates, furnaces, and molds. ng with ceramic support. Includes a 5-ft coiled	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62  HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86 General-purpose WD-08516-75 WD-08500-75  Standard straight Exposed junction WD-08517-60	robes, 8"L. is isolated  J K T  ic probes, J K T  air/gas pro J K T  probes, 10 is isolated J	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi  -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)  1.5"L. Attach magnetic probe to any fla -310 to 1200°F (-190 to 649°C) -418 to 750°F (-250 to 649°C) -418 to 750°F (-250 to 699°C) bes; 8.5"L; for general-purpose air ten -310 to 1000°F (-190 to 537°C) -418 to 1000°F (-250 to 537°C) -418 to 1000°F (-250 to 537°C) -418 to 1000°F (-250 to 537°C) -418 to 1000°F (-190 to 537°C)	eas.  ng with ceramic support. Include 5-ft coiled ca  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid  Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  Iperature measurement. Includes 5-ft coiled ca  Junction: exposed; isolated Response time: 225 s at 5 m/s airflow 316 SS sheath and radiation shield; miniconnector; nylon handle  t plates, furnaces, and molds.  ng with ceramic support. Includes a 5-ft coiled  Junction: exposed; isolated Response time: 30 sec 316 SS shaft; aluminum housing;	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08514-86 WD-08517-75 WD-08516-75 WD-08500-75 Standard straight Exposed junction WD-08517-60 WD-08516-60 WD-08500-60	robes, 8°L. is isolated  J K T  ic probes, J K T  air/gas pro J K T  probes, 10 is isolated J K T	Small diameter is ideal for confined and from 316 SS shaft and aluminum housi    -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 650°F (-250 to 343°C)  1.5"L. Attach magnetic probe to any flat    -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 1200°F (-250 to 399°C)  bes; 8.5"L; for general-purpose air tent    -310 to 1000°F (-190 to 537°C)   -418 to 1000°F (-250 to 537°C)    -418 to 1000°F (-250 to 537°C)    -418 to 1000°F (-190 to 649°C)   -418 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 650°F (-250 to 343°C)	eas. ng with ceramic support. Include 5-ft coiled cal Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  uperature measurement. Includes 5-ft coiled can be seen to b	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62  HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86 General-purpose WD-08516-75 WD-08500-75  Standard straight Exposed junction WD-08517-60 WD-08516-60 WD-08500-60	robes, 8"L. is isolated  J K T  ic probes, J K T  air/gas pro J K T  probes, 10 is isolated J K T	Small diameter is ideal for confined and from 316 SS shaft and aluminum housi    -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 650°F (-250 to 343°C)  1.5"L. Attach magnetic probe to any flat    -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 1200°F (-250 to 399°C)  bes; 8.5"L; for general-purpose air tent    -310 to 1000°F (-190 to 537°C)   -418 to 1000°F (-250 to 537°C)    -418 to 1000°F (-250 to 537°C)    -418 to 1000°F (-190 to 649°C)   -418 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 650°F (-250 to 343°C)	eas.  ng with ceramic support. Include 5-ft coiled cai  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid  Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  nperature measurement. Includes 5-ft coiled cai  Junction: exposed; isolated Response time: 225 s at 5 m/s airflow 316 SS sheath and radiation shield; miniconnector; nylon handle  t plates, furnaces, and molds. ng with ceramic support. Includes a 5-ft coiled  Junction: exposed; isolated Response time: 30 sec 316 SS shaft; aluminum housing; miniconnector; nylon handle	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62  HVAC probes Dropping/magnet WD-08519-86 WD-08514-86 WD-08525-86 General-purpose WD-08516-75 WD-08500-75  Standard straight Exposed junction WD-08517-60 WD-08516-60 WD-08500-60	robes, 8"L. is isolated  J K T  ic probes, J K T  air/gas pro J K T  probes, 10 is isolated J K T	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi  -310 to 1200°F (-190 to 649°C) -418 to 1200°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)  1.5"L. Attach magnetic probe to any fla -310 to 1200°F (-190 to 649°C) -418 to 750°F (-250 to 649°C) -418 to 750°F (-250 to 399°C)  bes; 8.5"L; for general-purpose air tem -310 to 1000°F (-190 to 537°C) -418 to 1000°F (-250 to 537°C) -418 to 1000°F (-250 to 537°C)  "L. Use to monitor such surfaces as ho from 316 SS shaft and aluminum housi -310 to 1200°F (-190 to 649°C) -418 to 650°F (-250 to 649°C) -418 to 650°F (-250 to 343°C)	eas.  ng with ceramic support. Include 5-ft coiled cai  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid  Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  nperature measurement. Includes 5-ft coiled cai  Junction: exposed; isolated Response time: 225 s at 5 m/s airflow 316 SS sheath and radiation shield; miniconnector; nylon handle  t plates, furnaces, and molds. ng with ceramic support. Includes a 5-ft coiled  Junction: exposed; isolated Response time: 30 sec 316 SS shaft; aluminum housing; miniconnector; nylon handle	ble.    1.5"
Small-diameter p Exposed junction WD-08517-62 WD-08516-62 WD-08500-62 HVAC probes Dropping/magnet WD-08514-86 WD-08514-86 WD-08514-86 General-purpose WD-08516-75 WD-08500-75 Standard straight Exposed junction WD-08517-60 WD-08516-60 WD-08500-60 Velcro® strap-on Strap is 8" long ar	robes, 8"L. is isolated  J K T  ic probes, J K T  air/gas pro J K T  probes, 10 is isolated J K T	Small diameter is ideal for confined ar from 316 SS shaft and aluminum housi    -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 650°F (-250 to 343°C)  1.5°L. Attach magnetic probe to any fla    -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 750°F (-250 to 399°C)    bes; 8.5°L; for general-purpose air tem    -310 to 1000°F (-190 to 537°C)   -418 to 1000°F (-250 to 537°C)    "L. Use to monitor such surfaces as ho from 316 SS shaft and aluminum housi   -310 to 1200°F (-190 to 649°C)   -418 to 650°F (-250 to 343°C)    "L. Temporarily or permanently strap ont eters from 0.75 to 2.75" OD. Include 10-310 to 212°F (-190 to 100°C)	eas.  ng with ceramic support. Include 5-ft coiled cai  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid  Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  sperature measurement. Includes 5-ft coiled cai  Junction: exposed; isolated Response time: 225 s at 5 m/s airflow 316 SS sheath and radiation shield; miniconnector; nylon handle  t plates, furnaces, and molds. ng with ceramic support. Includes a 5-ft coiled  Junction: exposed; isolated Response time: 30 sec 316 SS shaft; aluminum housing; miniconnector; nylon handle  to tubing or pipes—probes are easy to install aft straight PVC cable.  Junction: ungrounded	ble.    1.5"
mall-diameter p xposed junction WD-08517-62 WD-08516-62 WD-08500-62 WAC probes Propping/magnet WD-08514-86 WD-08514-86 WD-08525-86 General-purpose WD-08516-75 WD-08500-75 Standard straight xposed junction WD-08517-60 WD-08516-60 WD-08500-60 Gelcro® strap-on strap is 8" long ar WD-08469-80	robes, 8"L. is isolated  J K T  ic probes, J K T  air/gas pro J K T  probes, 10 is isolated J K T	Small diameter is ideal for confined and from 316 SS shaft and aluminum housi    -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 650°F (-250 to 343°C)  1.5"L. Attach magnetic probe to any flat   -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 1200°F (-250 to 399°C)    bes; 8.5"L; for general-purpose air tem   -310 to 1000°F (-190 to 537°C)   -418 to 1000°F (-250 to 537°C)    "L. Use to monitor such surfaces as ho from 316 SS shaft and aluminum housi   -310 to 1200°F (-190 to 649°C)   -418 to 1200°F (-250 to 649°C)   -418 to 650°F (-250 to 343°C)    . Temporarily or permanently strap onteters from 0.75 to 2.75" OD. Include 10-	eas.  ng with ceramic support. Include 5-ft coiled cai  Junction: exposed; isolated Response time: 15 sec 316 SS shaft and aluminum housing; miniconnector; nylon handle  t ferrous surface. Include 10-ft straight SS braid  Junction: exposed Response time: 30 sec Aluminum housing; miniconnector  nperature measurement. Includes 5-ft coiled cai  Junction: exposed; isolated Response time: 225 s at 5 m/s airflow 316 SS sheath and radiation shield; miniconnector; nylon handle  t plates, furnaces, and molds. ng with ceramic support. Includes a 5-ft coiled  Junction: exposed; isolated Response time: 30 sec 316 SS shaft; aluminum housing; miniconnector; nylon handle to tubing or pipes—probes are easy to install aft straight PVC cable.	ble.    1.5"

<sup>\*</sup>Overall probe sheath lengths may vary up to  $\pm 0.25$ ".





# **RTD Selection Guide**

#### What is an RTD?

RTD stands for Resistance Temperature Detector. This is the sensing technology that determines temperature by measuring the change in electrical resistance across two metal wires. The resistance value is then measured and interpreted by a RTD thermometer, and displayed for a user to view. While RTD wire can be made of any metal, platinum is the metal of choice due to its excellent repeatability, stability, and resistance to corrosion and chemicals.

The temperature to resistance curve varies for different RTD elements. All Oakton RTD probes have an Alpha coefficient of 0.003850  $\Omega/\Omega$ /°C (DIN IEC 751). Resistance at ice point (0°C) is 100  $\Omega$ . This curve is well documented and so ensures crosscompatibility between Oakton RTD thermometers and probes and those made by other thermometry suppliers.

#### Why choose an RTD?

RTDs are more accurate and stable than other sensors, such as thermocouples, but they cannot be used to measure extremely high temperatures. Choose an RTD sensor if you are willing to pay a little more for increased accuracy and repeatability.

Conversely, RTDs have a wider temperature range compared to thermistor probes but lower overall system accuracy. When your expected measurements require a balance between range and accuracy, RTDs are the best choice.

The table at right shows the general trade-offs.

# Time constants and temperature response

14

Temperature probe response is often stated as time constant. By definition, a probe reaches 63% of its final value within one time constant. Within five time constants, the probe will reach 99% of final reading. The time constant or response depends on a number of factors including junction design, sheath materials, and type of sensing element.



#### System Accuracies—RTD vs Thermistor and Thermocouple

Instrument	Recommended temperature range	Widest possible temperature range	Typical accuracies
Platinum RTD			
Probes	-297 to 932°F (-182 to 500°C)	_	±0.2 to 0.35% of reading
Meters	_	_	±0.1% of reading and ±1°F (±1°C)
Thermistor			
400-series probes	-40 to 302°F (-40 to 150°C)	_	±0.36°F (±0.2°C) from 32 to 167°F (0 to 75°C)
Meters	_	_	±0.2 to 0.4°F (±0.1 to 0.2°C)
Thermocouple			
Type J probes	32 to 1336°F (0 to 724°C)	-310 to 1832°F (-190 to 1000°C)	±1.8 to 7.9°F or ±0.4% of reading above 32°F,
Type K probes	32 to 2300°F (0 to 1260°C)	-418 to 2507°F (-250 to 1375°C)	whichever is greater
Type T probes	−299 to 700°F (−183 to 371°C)	-418 to 752°F (-250 to 400°C)	±0.9 to 3.6°F or ±0.4% of reading above 32°F, whichever is greater
Type E probes	32 to 1600°F (0 to 871°C)	32 to 1650°F (0 to 898°C)	±1.8 to 7.9°F or ±0.4% of reading above 32°F, whichever is greater
Meters		_	$\pm 0.1$ to 1% of reading and $\pm 1.8$ °F ( $\pm 1$ °C)



WD-17002-04 NIST-traceable certificate for RTD system (meter + probe)

WD-17000-04 NIST-traceable certificate for RTD meter

WD-17001-04 NIST-traceable certificate for RTD probe

Service includes test data calibrated at four temperature test points.



# **Temp 360 Datalogging RTD Thermometer**

#### **Our most advanced RTD thermometer**

#### **Datalogging for up to 2000 points**

▼ Time-and-date stamp for advanced data analysis

#### **Menu-driven setup and operation**

▼ Detailed on-screen information makes the Temp 360 easy to use

#### **USB** output

 Easily transfer stored readings to your computer

#### Standard three-pin connector

▼ Use with many widely available probes or order from our selection

#### All push-button operation

▼ For fast, easy use

#### **Compact size**

▼ Fits right in your pocket—take your Oakton Temp meter anywhere!

#### °C/°F selectable

# Minimum and maximum temperature display

 Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

# Temperature offset calibration adjustment

 Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

 Freezes measurements for convenient reading and recording

#### **Auto-off function**

 Turns off meter after 17 minutes of nonuse to save batteries

# Sealed keypad and ABS plastic case; optional rubber armor

 Meet IP54 standards for splash resistance; armor adds protection and features a built-in stand

# Select a probe to match your application

See page 18 to see our wide selection of probes.









#### **Specifications**

Range: -330 to 2210°F (-201 to 1210°C)

From -330.0 to -100°F/°C: 0.1°F/°C, From -99.99 to 99.99°F/°C: 0.01°F/°C,

From 100.0 to 999.9°F/°C: 0.1°F/°C, Above 1000°F/°C: 1°F/°C

#### **Accuracy**

From  $^{-}$ 330.0 to  $^{-}$ 100°F/°C:  $^{+}$ 0.1°F/°C, From  $^{-}$ 99.99 to 99.99°F/°C:  $^{+}$ 0.06°F/ $^{+}$ 0.03 °C, From 100.0 to 999.9°F/°C:  $^{+}$ 0.1°F/°C, Above 1000°F/°C:  $^{+}$ 1°F/°C

**Datalogging:** 2000 real-time readings, with time-and-date stamp

**Display:** 4-digit, custom dot matrix display; 1/4" x 1/2" digits, 21/4" x 11/2" backlit viewing area

**Power:** three AA batteries (included) or optional AC adapter

**Battery life:** 400 hours continuous (without use of backlighting)

 $\begin{tabular}{ll} \textbf{Probe}: one 100 $\Omega$ platinum RTD with three-pin DIN connector (not included) \\ \end{tabular}$ 

**Dimensions:** 4"W x 7"H x 2"D (18 x 10.2 x 5.2 cm) **Weight:** 1.25 lb (0.6 kg)

Ordering Information





15



Catalog number	Description	Included
WD-35426-60	Temp 360 datalogging	Meter and batteries
WD-35427-80	Rubber armor	Rubber armor with built-in meter stand
WD-35427-85	Hands-free kit	Multipurpose hanging strap and mounting magnets





# **Temp 16 RTD Thermometer**

# Rugged and reliable

#### Standard three-pin connector

▼ Use with many widely available probes or order from our selection

#### All push-button operation

▼ For fast, easy use

#### **Ergonomic design**

▼ Easy to grip for one-handed operation

#### °C/°F selectable

# Minimum and maximum temperature display

 Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

# Temperature offset calibration adjustment

 Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

 Freezes measurements for convenient reading and recording

#### **Auto-off function**

 Turns off meter after 17 minutes of nonuse to save batteries

#### Sealed keypad and ABS plastic case

▼ Meet IP54 standards for splash resistance

#### **Protective rubber armor**

Protects meter and features a built-in stand

#### **Applications**

**General:** Ideal for any application that requires measuring/monitoring the temperature of any liquid, solid, semisolid, or gel.

**Educational:** An ideal student thermometer—select °C or °F with the push of a button, and avoid dangers from broken glass or mercury spillage.

# Select a probe to match your application

See page 18 to see our wide selection of probes.



#### **Specifications**

Range: -328 to 1562°F (-200 to 850°C)

**Resolution:** 1°F/C from -328 to -148°F (-200 to -100°C) and 392 to 1562°F (200 to 850°C); 0.1°F/C from -148 to 392°F (-100 to 200°C)

#### Accuracy

From -328 to  $-148^{\circ}$ F (-200 to  $-100^{\circ}$ C):  $\pm 4^{\circ}$ F/ $\pm 2^{\circ}$ C, From -148 to  $392^{\circ}$ F (-99.9 to  $199.9^{\circ}$ C):  $\pm 0.4^{\circ}$ F/ $\pm 0.2^{\circ}$ C, From 392 to  $1562^{\circ}$ F (200 to  $850^{\circ}$ C):  $\pm 4^{\circ}$ F/ $\pm 2^{\circ}$ C

Display: 4-digit LCD, 2 1/4" x 11/2" backlit viewing area

Power: three AA batteries (included)

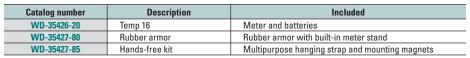
**Battery life:** 400 hours continuous (without the use of backlighting)

**Probe:** one 100  $\Omega$  platinum RTD with three-pin DIN connector (not included)

Dimensions: 4"W x 7"H x 2"D (18 x 10.2 x 5.2 cm) (with protective boot)

Weight: 1.25 lb (0.6 kg)

#### **Ordering Information**





FAX Toll Free: 1-866-433-6684 or 1-281-359-0084





**Acorn® Temp 6 RTD Thermometer** 

**Our simplest RTD thermometer** 

#### Standard mini-three-pin connector

Accepts a variety of 100 Ω Pt 100 probes

#### All push-button operation

▼ For fast, easy use

#### **Compact size**

▼ Fits right in your pocket—take your Oakton Temp meter anywhere!

#### °C/°F selectable

# Minimum and maximum temperature display

 Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

# Temperature offset calibration adjustment

 Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

 Freezes measurements for convenient reading and recording

#### **Auto-off function**

 Turns off meter after 17 minutes of nonuse to save batteries

#### **Optional rubber armor**

Protects meter and features a built-in stand

#### **Applications**

**General**: Ideal for any application that requires measuring/monitoring the temperature of any liquid, solid, semisolid, or gel.

**Industrial**: Use in photo developing, chemical, and plating industries.

# Select a probe to match your application

See page 18 to see our wide selection of probes.





Rubber armor features built-in stand

#### **Specifications**

Range: -418 to 2501°F (-250 to 1372°C)
Resolution: 0.1°F/C from -99.9 to 299.9°F/C;
1°F/C outside this range

Accuracy: ±0.25% of reading plus 0.9°F (0.5°C) above -99.9°F/C, ±0.25% of reading plus 2°F (1°C) below

Display: single-line LCD, 1/8" high

Power: four AAA batteries (included), for >200 hours continuous use

Probe: one 100  $\Omega$  platinum RTD with mini-three-pin DIN connector (not included)

**Dimensions:** 5.5" x 2.7" x 1.3" (14 x 7 x 3.5 cm)

Weight: 0.9 lb (0.4 kg)

#### **Ordering Information**





17

Catalog number	Description	Included
WD-35626-20	Acorn Temp 6	Meter, rubber armor, and batteries
WD-85000-02	Certified meter kit	Meter, general-purpose probe (08117-70), NIST-traceable certification, rubber armor, and batteries





# **RTD Probes**

# Provide excellent accuracy, stability, and repeatability

Use our RTD probes to measure temperature when accuracy is important. All probes include a 5-ft PVC coiled cord with strain relief that protects from repeated flexing and tugging. Ergonomic, easy-grip 5" long glass-filled nylon handle provides maximum heat insulation and impact resistance. Fingerstops on handle prevent probe from rolling and fingers from sliding when inserting probe into hard materials.

The 316 stainless steel sheath (tip casing) provides durability, strength, and maximum abrasion resistance. Rugged three-pin circular connector with positive-locking tab prevents loose connections. Compatible with all Oakton and Acorn® RTD thermometers.



Nylon handle

- A General-Purpose: Designed for most common and liquid immersion applications.
- **Penetration:** Pointed tip style for penetration into hard and semi-solid materials. Sturdy stainless steel tip casing prevents tip from bending when inserting.
- © Surface: Flat sensor wires are encased in hardened MgO ceramic insulation to ensure positive contact even under vibrating circumstances and extreme conditions.
- Air/Gas: Perforated shield allows air and other gases to flow into sensor for quick readings. Metal shield also absorbs radiated heat and minimizes sensor error.



Three-pin connector

- **EFEP-Coated:** Same as our general-purpose tip, but this tip has a FEP coating over the tip casing for use with acids and strong chemicals.
- Small Diameter: Same as our general-purpose tip, but this probe has a 1/8" diameter tip for insertion into soft and semisoft materials.
- Smallest Diameter Wedge: Small diameter angled tip with point can be wedged into tight areas and minimizes damage to samples.
- H Alligator Clip: Clips onto objects up to %" thick. The 10-ft, 304 stainless steel flexible braid over fiberglass cable has no handle.

#### **Specifications & Ordering Information**

Key	Catalog number	Temperature range	Tip length	Dimensions
A	WD-08117-70 WD-08117-72	–58 to 932°F (–50 to 500°C)	10" 18"	
В	WD-08117-85	–58 to 932°F (–50 to 500°C)	4"	
C	WD-08117-75	–58 to 932°F (–50 to 500°C)	8"	0.250" dia 1.6" 6.5"
D	WD-08117-90	–58 to 932°F (–50 to 500°C)	10"	
E	WD-08117-87	–50 to 500°F (–50 to 260°C)	10"	┌── 0.145" dia
E	WD-08117-73 WD-08117-74	−58 to 932°F (−50 to 500°C)	10" 18"	
G	WD-08117-80	–58 to 932°F (–50 to 500°C)	2"	
н	WD-08117-89	-58 to 932°F (-50 to 500°C)	1.5"	0.38"



**WD-17002-04 NIST-traceable certificate** for RTD system (meter + probe) with test data calibrated at four temperature test points

WD-17001-04 NIST-traceable certificate for RTD probe





# **Thermistor Selection Guide**

#### What is a thermistor?

A thermistor is a thermally sensitive resistor which changes electrical resistance due to temperature changes. It has very predictable characteristics and offers long-term stability.

#### Why choose a thermistor?

Thermistors have excellent accuracy over the biological or ambient temperature ranges when compared to thermocouples or RTDs, but have a limited temperature range that usually cannot exceed 300°F (150°C). Response times are generally faster than other types of probes.

#### Other thermistor series

Unless otherwise specified, Oakton thermistor thermometers are designed for use with 400-series probes. These probes provide accurate thermistor results and are interchangeable with little probe-toprobe variation. Oakton meters can be used with 500-series probes (not offered by Oakton) but will require the user to consult a conversion chart typically provided with the 500-series probe. The 500-series probes have significant probe-to-probe variability that can not be compensated for in the meter. Oakton meters are not compatible with 700-series probes.





WD-17002-06 NIST-traceable certificate for Thermistor system (meter + probe)

WD-17000-06 NIST-traceable certificate for Thermistor meter WD-17001-06 NIST-traceable certificate for Thermistor probe Service includes test data calibrated at four temperature test points.

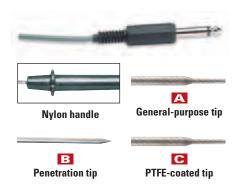
# **General-Purpose 400-Series Thermistor Probes**

#### Ideal for measurement in liquids or semisolids

Use our thermistor probes to measure temperature when accuracy within the biological range is important. All probes include a 5-ft PVC coiled cord with strain relief that protects from repeated flexing and tugging. Ergonomic, easygrip 5"L glass-filled nylon handle provides maximum heat insulation and impact resistance. Fingerstops on handle prevent probe from rolling and fingers from sliding when inserting probe into hard materials. The 316 stainless steel sheath (tip casing) provides durability, strength, and maximum abrasion resistance. All probes come with a 1/4" phono plug connector. Compatible with all Oakton and Acorn® thermistor thermometers.

Key	Catalog number	Temperature range	Tip length	Dimensions
A	WD-93824-00	−22 to 212°F (−30 to 100°C)	10"	10"
В	WD-93824-30	-22 to 212°F (-30 to 100°C)	4"	- 4"
C	WD-93824-12	−22 to 212°F (−30 to 100°C)	10"	10"

You'll find more thermistor probes on page 23.



- ▲ General-Purpose: Designed for most common and liquid immersion applications.
- **B** Penetration: Pointed tip style for penetration into hard and semisolid materials. Sturdy stainless steel tip casing prevents tip from bending when inserting.
- C PTFE-Coated: Same as our generalpurpose tip above, but this tip has a PTFE coating over the casing for use with acids and strong chemicals.

# THERMISTOR **V**



# **Temp 340 Datalogging Thermistor Thermometer**

#### Our most advanced thermistor thermometer

#### **Datalogging for up to 2000 points**

▼ Time-and-date stamp for advanced data analysis

#### Menu-driven setup and operation

▼ Detailed on-screen information makes the Temp 340 easy to use

#### **USB** outout

Easily transfer stored readings to your computer

#### Standard bayonet connectors

 Choose from a wide variety of thermistor probes

#### All push-button operation

▼ For fast, easy use

#### °C/°F selectable

# Minimum and maximum temperature display

 Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

# Temperature offset calibration adjustment

▼ Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

▼ Freezes measurements for convenient reading and recording

#### Auto-off function

▼ Turns off meter after 17 minutes of nonuse to save batteries

# Sealed keypad and ABS plastic case; optional rubber armor

 Meet IP54 standards for splash resistance; armor adds protection and features a built-in stand

# Select a probe to match your application

See pages 19 and 23 to see our wide selection of probes.





35426-50







#### **Specifications**

Range: -40.00 to 302.0°F (-40.00 to 150.0°C)
Resolution: 0.01 or 0.1°F/°C; auto-ranging to 0.1° above +99.99°

#### Accuracy

From -40.00 to 99.99°F (-40.00 to 99.99°C): ±0.06°F (±0.03°C),

From 100.0 to 257.0°F (100.0 to 125.0°C):  $\pm$ 0.1°F ( $\pm$ 0.1°C), From 257.0 to 302.0°F (125.0 to 150.0°C):  $\pm$ 0.9°F ( $\pm$ 0.5°C)

Datalogging: 2000 real-time readings, with time-and-date stamp

**Ordering Information** 

Display: 4-digit, custom dot matrix display; ½" x ½" digits, 2½" x 1½" backlit viewing area

Power: three AA batteries (included) or optional AC adapter

Battery life: 400 hours continuous (without use of backlighting)

**Probe:** two 400-series thermistor (not included) **Dimensions:** 4"W x 7"H x 2"D (with protective boot)

Weight: 1.25 lb (0.6 kg)

Catalog number	Description	Included
WD-35426-50	Temp 340	Meter and batteries
WD-35427-80	Rubber armor	Rubber armor with built-in meter stand
WD-35427-85	Hands-free kit	Multipurpose hanging strap and mounting magnets





# **Temp 14 Thermistor Thermometer**

# Rugged and reliable

#### **Standard bayonet connectors**

▼ Choose from a wide variety of thermistor probes

#### All push-button operation

▼ For fast, easy use

#### Ergonomic design

▼ Easy to grip for one-handed operation

#### °C/°F selectable

# Minimum and maximum temperature

▼ Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

#### Temperature offset calibration adjustment

▼ Push-button adjustment for fine-tuning factory calibration

#### Hold function

▼ Freezes measurements for convenient reading and recording

#### Auto-off function

▼ Turns off meter after 17 minutes of nonuse to save batteries

#### Optional rubber armor

▼ Protects meter and features a built-in stand

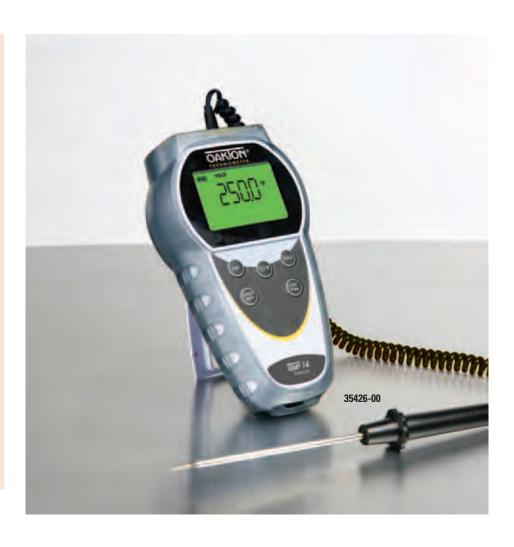
#### **Applications**

General: Great for QC and research lab testing requiring analysis.

Laboratory: Ideal range for biological processes.

#### Select a probe to match your application

See pages 19 and 23 to see our wide selection of probes.



#### **Specifications**

Range: -40.00 to 302.0°F (-40.00 to 150.0°C) Resolution: 0.01 or 0.1°F/°C; auto-ranging to 0.1° above +99.99°

#### Accuracy:

From -40.00 to 99.99°F (-40.00 to 99.99°C): ±0.06°F (±0.03°C),

From 100.0 to 257.0°F (100.0 to 125.0°C): ±0.1°F (±0.1°C), From 257.0 to 302.0°F (125.0 to 150.0°C): ±0.9°F (±0.5°C)

Display: 4-digit LCD (1/4" X 1/2" digits), 21/4" x 11/2" backlit viewing area

Power: three AA batteries (included) or optional AC adapter

Battery life: 700 hours continuous (without use of backlighting)

Probe: one 400-series thermistor (not included) Dimensions: 4"W x 7"H x 2"D (18 x 10.2 x 5.2 cm) (with protective boot)

Weight: 1.25 lbs (0.6 kg)

#### **Ordering Information**







21

# THERMISTOR **V**



# **Acorn® Temp 4 Thermistor Thermometer**

# Best accuracy in biological temperature range

#### All push-button operation

▼ For fast, easy use

#### **Compact size**

▼ Fits right in your pocket—take your Oakton Temp meter anywhere!

#### °C/°F selectable

#### Minimum and maximum temperature display

▼ Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

#### Temperature offset calibration adjustment

▼ Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

▼ Freezes measurements for convenient reading and recording

#### Auto-off function

▼ Turns off meter after 17 minutes of nonuse to save batteries

#### Protective rubber armor

 Protects meter and features a built-in stand

#### **Applications**

General: Ideal for any application that requires measuring/monitoring the temperature of any liquid, solid, semisolid, or gel.

Laboratory: Monitor heating or cooling biological samples

Educational: An ideal student thermometer—select °C or °F with the push of a button, and avoid dangers from broken glass or mercury spillage.

#### Select a probe to match your application

See pages 19 and 23 to see our wide selection of 400-series probes.



400-series connector on top of meter for fast probe connections



**Rubber armor features** built-in stand



35626-00

#### **Specifications**

Range: -40 to 257°F (-40 to 125°C) Resolution: 0.1°F (0.1°C) from -147.8 to 391.8°F (-99.9 to 199.9°C); 1.0°F (1.0°C) outside this range Accuracy: ±0.4°F (±0.2°C) from -147.8 to 391.8°F (-99.9 to 199.9°C); ±4.0°F (±2.0°C) outside this range

Input connector: 6.3 mm phono jack

Display: single-line LCD

Power: four 1.5 V AAA batteries (included), for >200 hours continuous use

Probe: one 400-series thermistor probe (not included) Dimensions: 5.5" x 2.7" x 1.3" (14 x 7 x 3.5 cm)

Weight: 0.9 lb (408 g)

#### **Ordering Information**







Catalog number	Description	Included
WD-35626-00	Acorn Temp 4	Meter, rubber armor, and batteries
WD-85000-04	Certified meter kit	Meter, general-purpose probe (93824-00), NIST-traceable certification, rubber armor, and batteries

www.novatech-usa.com

FAX Toll Free: 1-866-433-6684 or 1-281-359-0084



# **▼** THERMISTOR

# Flexible 400-Series Thermistor Probes

# **Excellent accuracy over the biological temperature range**

Probes are accurate to  $\pm 0.2^{\circ}F$  from 32 to 150°F ( $\pm 0.1^{\circ}C$  from 0 to 70°C). Electrically isolated probes include a nondetachable 10-ft lead with  $\frac{1}{4}$ " phono plug (except as noted).



23

#### **Specifications & Ordering Information**

	•		
Catalog number	Description	Temperature range	Dimensions
WD-08491-02	General-purpose probe, immersible for short-term deep-water and sub soil readings. Vinyl sheath and tip. 10-ft lead.	-40 to 212°F (-40 to 100°C)	%6" max %4" dia
WD-08491-04	Like 08491-02 above, but with 50-ft lead.		
WD-08491-03	Like 08491-02 above, but with 100-ft lead.		
WD-08491-05	Small flexible probe, vinyl sheath and tip.	-40 to 212°F (-40 to 100°C)	<sup>1</sup> / <sub>6</sub> " dia _
WD-08491-06	Liquid-immersion probe, 5/32" dia, 316 stainless steel (SS). Immersible only to cap unless waterproofed.	-40 to 302°F (-40 to 150°C)	
WD-08491-07	Like 08491-06 above, but with ½" dia probe.		41/2" + 7/8"
WD-08491-13	Liquid-immersion probe, chemically inert for thermometric titrations. Pyrex® glass sheath.	-40 to 302°F (-40 to 150°C)	_— ¾6" dia 
WD-08491-17	Small flexible probe for frozen food packages and cuvettes. Nylon and epoxy tip.	-110 to 212°F (-80 to 100°C)	¹/s" dia
WD-08491-15	Epoxy-encapsulated thermistor element. Copper wire is 32 gauge; 3" long (no plug).	-110 to 167°F (-80 to 75°C) continuous use; 212°F (100°C) max intermittent use.	_
WD-07549-99	1/4" phone plug for 08491-15 (above)	_	732 ula 3 coppei wite
WD-08491-12	Pipe-fitting probe for closed pipes or vessels. Probe and fitting are 316 SS; not autoclavable; nondetachable lead. Not electrically isolated; 4½" long.	-40 to 300°F (-40 to 150°C)	5/32" dia
WD-08491-14	Pipe-fitting probe for closed pipes or vessels. Probe and fitting are 316 SS; autoclavable except lead; lead is detachable via BNC connector. Not electrically isolated; 1" long.	-40 to 300°F (-40 to 150°C)	1/ <sub>62</sub> " dia
WD-08491-08	Air temperature probe for test rooms, gas stream temperatures, and incubators. 316 SS cage around epoxy-encapsulated thermistor.	-40 to 300°F (-40 to 150°C)	/½" dia
WD-08491-10	Attachable surface probe, recommended for skin or flat-surface temperature measurements. Epoxy-backed 316 SS disk. Vinyl-covered parallel leads.	-40 to 212°F (-40 to 100°C)	3/6" dia, 10-ft L flat lead, 0.05" x 0.132" 1/6" thick
WD-08491-09	Surface probe for skin, flat surfaces, and soil temperatures. Disk is 316 SS; probe includes handle.	-40 to 300°F (-40 to 150°C)	13/2" dia, 5/4" thick 17 gauge 18 gauge
WD-08491-11	Small surface probe. Epoxy-backed 316 SS disk on 24" nondetachable PTFE lead. Not autoclavable; not electrically isolated.	-40 to 300°F (-40 to 150°C)	3/16" dia, 3/22" thick
WD-08491-16	Penetration probe for insertion into semi-	-40 to 300°F (-40 to 150°C)	

You'll find more thermistor probes on page 19.

# THERMISTOR V



Acorn® Temp 5
Thermistor Thermometer

Includes dedicated general-purpose probe

#### All push-button operation

▼ For fast, easy use

#### Compact size

▼ Fits right in your pocket—take your Oakton Temp meter anywhere!

#### °C/°F selectable

# Minimum and maximum temperature display

 Displays highest/lowest temperature since meter was switched on, or use Min/Max Hold Mode to continuously update lowest/highest temperature

# Temperature offset calibration adjustment

 Push-button adjustment for fine-tuning factory calibration

#### **Hold function**

 Freezes measurements for convenient reading and recording

#### **Auto-off function**

 Turns off meter after 17 minutes of nonuse to save batteries

#### Protective rubber armor

▼ Protects meter and features a built-in stand

#### **Applications**

**General:** Ideal for any application that requires measuring/monitoring the temperature of any liquid, solid, semisolid, or gel.

**Educational:** An ideal student thermometer—select °C or °F with the push of a button, and avoid dangers from broken glass or mercury spillage.





Great economical general-purpose thermometer



Rubber armor features built-in stand

#### **Specifications**

Range: -40 to 257°F (-40 to 125°C) Resolution: 0.1°F (0.1°C) Accuracy: ±0.4°F (±0.2°C) Input connector: 6.3 mm phono jack

Display: single-line LCD

Power: four 1.5 V AAA batteries (included), for >200 hours continuous use Probe: custom thermistor (included)

**Dimensions:** 5.5" x 2.7" x 1.3" (14 x 7 x 3.5 cm)

Weight: 0.9 lb (408 g)

#### **Ordering Information**







Catalog number Description		Included	
WD-35626-10	Acorn Temp 5	Meter, rubber armor, general-purpose probe, and batteries	
WD-85000-06	Certified meter kit	Meter, general-purpose probe, NIST-traceable certification, rubber armor, and batteries	

#### Oakton Pocket Thermometer

**Quickly verify temperatures.** This thermometer has a water-resistant sealed case—ideal for use with liquids. Dishwasher safe.

Features °F/°C selection, Min/Max button, and a 4"L stainless steel tapered probe for penetration into most semi-solid and liquid substances. Includes a plastic protective sleeve with pocket clip and one battery.

Range: 14 to 392°F (-10 to 200°C)

Dimensions

Probe: 4¾"L x ¾4" dia Head: 1½" dia

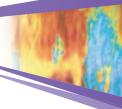
Catalog number	Description	
WD-90003-00	Digital pocket thermometer	

1 year warrant









# **Infrared Thermometers**

#### Why use noncontact infrared thermometers?

Noncontact infrared (IR) thermometers use infrared technology to quickly and conveniently measure the surface temperature of objects. They provide fast temperature readings without physically touching the object. You simply aim, pull the trigger, and read the temperature on the LCD.

Lightweight, compact, and easy-to-use IR thermometers can safely measure hot, hazardous, or hard-to-reach surfaces without contaminating or damaging the object. Also, infrared thermometers can provide several readings per second, as compared to contact methods where each measurement can take several minutes.

#### **Typical applications**

Industrial/Electrical: Monitor steam systems, boiler operations, and motor/engine cooling systems performance; detect hot spots in electrical systems, panels, and motor bearings.

**Heating and air conditioning:** Monitor furnace and duct leakage; detect insulation breakdown; check ceilings, walls and floors for proper room temperature, heat loss, and gain.

Food safety: Fast and convenient screening tool for both cold and hot foods for Food Safety and HACCP. No contamination or damage to the product. Easily take temperature of products moving on conveyors or hard-to-reach places. Verify equipment performance, sanitation, and process temperature conditions. Scan cooling systems, refrigerated display cases, trucks, and storage areas before loading or stacking.

Agriculture: Monitor plant temperatures for stress.

# Mini TempTestr® IR Thermometer

# Economical noncontact thermometer fits right in your pocket!

This pocket-size infrared thermometer takes surface temperature readings of any liquid, solid, or semisolid in less than one second. Operation is simple—turn it on, point at sample, and take reading. Noncontact temperature measurements are ideal for food preparation, life sciences, field use, cleanrooms, and for fast inspections.

Features include switchable °F/°C display, Hold function, minimum/maximum memory readings, adjustable emissivity, low-battery indication, flip-open stand, and soft touch keypad.

What's included: metal storage case, wrist strap, and spare battery.



#### **Specifications & Ordering Information**

1 year

•	-
Catalog number	WD-39642-00
Range	-27 to 428°F (-33 to 220°C)
Accuracy	±2% of reading or ±4°F (±2°C), whichever is greater
Response time	One sec
Emissivity	Adjustable from 0.01 to 1.00
Laser sighting	None
Distance-to-target size ratio	1:1
Power	One 3 V battery (included)
Dimensions	2½"L x 1½"W x ½"H

# TempTestr® IR Thermometer

#### Laser sighting pinpoints your exact target area Ergonomic design allows for easy gripping and one-handed operation

Taking temperature measurements has never been easier—just point the thermometer at your target and push one button! The TempTestr IR thermometer is ideal for use in the home, office, field, or lab—anywhere you need to quickly and accurately measure surface temperatures. Results in under ½ second. Hold function freezes reading for seven seconds.

What's included: one 9 V battery.



#### **Specifications & Ordering Information**

Catalog number	WD-35625-10
Range	0 to 500°F (-18 to 260°C)
Accuracy	±2% or ±3°F (2°C) from 77 to 500°F (25 to 260°C); ±5°F (3°C) from 30 to 77°F (-1 to 25°C); ±7°F (4°C) from 0 to 30°F (-18 to -1°C)
Response time	500 msec, 95% response
Emissivity	Preset at 0.95
Laser sighting	Class II
Distance-to-spot-size ratio	8:1
Power	One 9 V battery (included)
Dimensions	7¼"L x 1¾"W x 1½"H

WD-35625-80 Carrying case

# INFRARED V



# InfraPro® Infrared Thermometers

Easily measure moving objects and dangerous targets from a distance

Single, extra-bright laser targets your measurement area InfraPro 3, 4, and 5 log readings and feature an RTD input to take contact temperatures

Rugged enough for industrial use, yet compact and lightweight enough to be carried around with you, these infrared thermometers are extremely easy to use: just aim, pull the trigger, and read the display. The 41/2-digit backlit display shows temperature readings in °F or °C; low-battery indication; and hold, scan, and max. Display holds for 7 seconds. Underrange and overrange conditions are also indicated on the display.

Advanced models 35639-20, -30, and -40 indicate max, min, dif, avg, emissivity, high alarm, low alarm, probe, log, and recall. Other features include an RTD input, 12 datalogging points, adjustable emissivity, and a rubber grip and nose that improve resistance to shock, damage, water, and dust. Extra-bright laser is visible in indoor and outdoor applications. InfraPro 5 is rated intrinsically safe for Class I Division 1, Groups A, B, C, D and Class I locations, Zone 0, AEx ia IIC, T4 at 50°C.

What's included: one 9 V battery and hard carrying case. InfraPro 5 also includes an intrinsically safe RTD contact probe.



Laser targets your measuring area.

Use InfraPro in applications such as...



Measuring industrial equipment that is too hot to touch.



Measuring panels that are difficult to evaluate with contact sensors.

# 35639-20 **SO**9001:2000



#### **Specifications & Ordering Information**

opositionations & studing information			- Wall	CLASS I LASER PRODUCT	
Catalog number	WD-35639-00 WD-35639-20		WD-35639-30	WD-35639-40	
Description	InfraPro 1	InfraPro 3 advanced	InfraPro 4 advanced	InfraPro 5 intrinsically safe	
Range	−25 to 999°F (−32 to 535°C)	–25 to 1100°F (–32 to 600°C)	–25 to 1400°F (–32 to 760°C)	–25 to 1400°F (–32 to 760°C)	
Resolution	0.5°F (0.2°C)	°F (0.2°C) 0.1°F (0.1°C)			
Accuracy	±19	±1% of the reading or ±2°F (±1°C) whichever is greater			
Response time		500 r	msec		
Emissivity	Fixed at 0.95	0.10 to 1.00			
Laser sighting	Class II laser	Class II laser	Class II laser	Class II laser	
Distance-to-target ratio	12:1	12:1 30:1		50:1	
Power	One 9 V battery (included)				
Contact probe	_	Optional	Optional	Included	
Dimensions	8"L x 6"W x 2"H				

WD-35629-50 Contact probe for 35639-20 and -30. Range is -40 to 500°F; 40"L coiled cable WD-35629-90 Soft carrying case with integral belt loop and Velcro® closure



Ensure the accuracy of your infrared equipment today. See pages 30-31 for more information on our NIST-traceable calibration services.



**Economical** InfraPro 1 meter has fixed emissivity for simplicity of use.



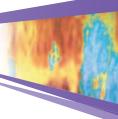
Advanced InfraPro 3. 4. and 5 meters have adjustable emissivity for measuring a wide variety of substances, and datalogging capabilities for storing measurements in the field.



The intrinsically safe InfraPro 5 meter includes remote RTD probe 35629-50 with a penetration tip.







# **Food Safety Infrared Thermometers**

# **TempTestr® IR Food Thermometer**

**Ideal for food inspections and HACCP programs** 

Noncontact measurement eliminates the risk of cross-contamination

Scan numerous surfaces quickly and easily

Sealed, hand-washable IP54 housing

Temperature measurement is essential when ensuring proper food storage, cooking and serving environments, and is required by the FDA. Quick checks with a non-contact thermometer can remove the hazard of cross-contamination and reduce the time a traditional probe requires.

This thermometer provides safe, noncontact readings in only ½ second. Use to measure food surfaces in the HACCP temperature danger zone (40 to 140°F or 4 to 60°C), the critical range where harmful bacteria grows most rapidly. LEDs quickly indicate if food temperatures are in the bacterial growth safety zone. Green LED light indicates food-safe hot and cold holding temperatures. Red LED light indicates that food is exposed to potentially dangerous temperatures and within the food temperature danger zone. Investigate further with a probe thermometer for internal temperatures. LED target system illuminates the exact measurement area. Compact design allows for easy one-handed operation.

What's included: one 9 V battery and wrist strap.



#### **Food Safety IR Thermometer**

A combination contact/noncontact thermometer with timer for all food applications Go/no-go LEDs provide quick check of HACCP food zones Sealed, hand-washable IP54 housing

Check critical food temperatures and monitor HACCP food safety zones with this combination contact/noncontact thermometer. LEDs rapidly indicate if food temperature is in the bacterial growth safety zone. Green lights indicate safe temperatures below 40°F (4°C) and above 140°F (60°C). Red light indicates the HACCP danger zone between 40 to 140°F (4 to 60°C). The contact penetration probe swings out for internal temperature checks, then folds in for storage. IR mode provides quick, noncontact surface measurements and stores maximum reading. Target illumination indicates target measurement area and is ideal for close working distances of 2 to 12". Built-in countdown timer with alarm monitors cooking and cooling intervals and HACCP exposure times—set countdown timer to a maximum of eight hours.

What's included: one 9 V battery, carrying case, and quick reference card.

#### **Specifications & Ordering Information**

SC9001:2000 CERTIFIED SUPPLIES





Catalog number	WD-35625-40			
Mode	Infrared Contact			
Range	30 to 525°F (-35 to 275°C) -40 to 390°F (-40 to 200°C)			
Accuracy	±2°F (±1°C) from 32 to 150°F (0 to 65°C) ±1°F (±0.5°C) from 32 to 150°F (0 to 65°C)			
Response time	500 msec 5 sec			
Emissivity	Preset at 0.97			
Laser sighting	LED (non-laser)			
Distance-to-target-size ratio	2.5:1			
Power	One 9 V battery (included)			
Dimensions	Overall: 2"L x 1¼"W x 6½"H; contact probe: 3¼"L x ½" dia			

 $\textbf{WD-35625-70 Replacement probe} \ \text{for thermometer} \ 35625\text{-}40$ 

WD-86106-10 Antimicrobial sanitizing wipes. Box of 100





Target illumination clearly indicates target area



Contact penetration probe swings out for fast temperature checks

# DATALOGGING V



TempLog & RH/TempLog Dataloggers

# **Automatically log temperature and humidity** readings for days, weeks, even months, then download data to your computer or printer!

#### **Large LCD display**

▼ Lets you immediately view current conditions; displays min/max values by day(s) or hour(s)

#### Selectable sampling rate

▼ Sample from once per 10 seconds to once per two hours (software required)

#### **External sensor input**

▼ For a temperature, contact, voltage, pH, or current sensor

#### **Specifications & Ordering Information**

Memory: 16,000 data points

Sampling rate: selectable via software from once per 10 seconds to two hours

Display: 2-digit LCD; 3/8" H

Output

Infrared: IRDA (infrared data assembly) interface to printer or computer with IRDA port RS-232: cable connection to your computer (order cable/software package separately)

Power: 3.6 V lithium battery (included)

Dimensions: 1"D x 23/4" dia

These loggers store up to 16,000 measurements, allowing you to track important temperature, humidity, and other process data for months. Loggers are ideal for shipping, storage, laboratories, factories, refrigerators, freezers, incubators, desiccators, greenhouses, and more. The two-digit LCD shows current conditionsminimum and maximum readings are available at the touch of a button. Display flashes if set limits are passed.

Models 35710-60 and -00 record temperature and feature a water-resistant and dustproof IP65-rated housing. Models 35710-62 and -10 record temperature and humidity and feature a dustproof IP60rated housing.

Optional external sensors (sold below) allow an additional parameter to be recorded. Connect current and voltage sensors with a transmitter to log other processes such as pressure, flow, pH, and level.

Software lets you set sampling rate, create graphs, and customize logging parameters. Software/cable package is required for use with additional dataloggers (sold separately below).

Kits include: one datalogger, CD-ROM software, and cable.





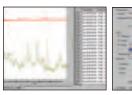




35710-00



35710-10





35710-50 Software

Parameters No. of channels	Danua Basalut	Resolution	A	Datalogger kits	Dataloggers only	
Parameters	NO. OI CHAIINEIS	Range	Resolution	Accuracy	Catalog number	Catalog number
Temperature	One internal, one external	-22 to 122°F (-30 to 50°C)	1°F (0.5°C)	±1.1°F (±0.6°C)	WD-35710-60	WD-35710-00
Temperature Humidity	One internal, one external	-22 to 122°F (-30 to 50°C) 0 to 100% RH	1°F (0.5°C) 1% RH	±1.1°F (±0.6°C) ±3% RH from 0 to 90% RH; ±6% RH from 90 to 100% RH	WD-35710-62	WD-35710-10

External Sensors can be plugged into a port located on each logger. Select from temperature, current, voltage, contact, or pH sensors. Each can be used to log and display additional external readings on your computer.

Temperature sensor is made of stainless steel and can be immersed in liquids or soil or used to measure the temperature of air. Current, voltage, and contact sensors can be scaled to match range and units of your transmitter or instrument output—use to log pH, conductivity, pressure, and more! Each sensor includes an 8.2-ft (2.5-m) cable.

Catalog number	Description	
WD-35710-70	Temperature probe, -60 to 212°F; 3½"L x ½" dia; 6-ft cable	
WD-35710-72	Current sensor, 0 to 20 mA	
WD-35710-74	Voltage sensor, 0 to 10 V	
WD-35710-76	Contact closure sensor, open/close	
WD-35710-78	pH adapter, 0 to 14 pH. pH electrode with BNC required	

#### Accessories

WD-35710-50 Microlab software and 8-ft cable, included with kits. Windows® 95/98/2000NT/XP compatible

WD-35710-65 Replacement datalogger battery, 3.6 V



To order a NIST-traceable calibration certificate with your datalogger, see pages 30-31.

# V DATALOGGING

**LoggerPlus Wireless Transmitting Systems** 

Remote real-time monitoring of up to 200 dataloggers on one computer

Computer can receive data from loggers up to 400 feet (120 meters) away!

#### LoggerPlus cradle

▼ Transforms your logger into a wireless (RF) transmitter

#### LoggerPlus receiver

 A small RF device that connects to your PC to receive wireless data from your loggers

#### **Required System Components**

- △ Datalogger (up to 200 on one computer)
- E Cradle (up to 200 on one computer)
- Wireless receiver and software



Cradle

35710-20

Datalogger shown in cradle; use cradle as shown or wall mount.



A 35710-00

Receiver 35710-25



Send data from up to 200 loggers to one computer!

#### ▲ TempLog and RH/TempLog Dataloggers

These loggers store up to 16,000 measurements at selectable intervals. The LCD displays current conditions. Choose from measuring temperature, temperature and humidity, or one of many processes by choosing an optional external sensor (see below right).

**Note:** Sensors must be used with datalogger cradle ("B" below) and AC adapter in order for data to be transmitted to computer monitoring station.

#### **Specifications & Ordering Information** for Dataloggers

Memory: 16,000 data points

Sampling rate: selectable via software from once per 10 seconds to two hours

Power: 3.6 V lithium battery (included)

Dimensions: 1"D x 23/4" dia

See page 28 for further specifications.

Catalog number	Description	
WD-35710-00	TempLog datalogger	
WD-35710-10	RH/TempLog datalogger	

#### **B** Datalogger Cradle

The datalogger cradle serves as a mount and wireless transmitter for the dataloggers. Each cradle can send a signal up to 400 ft (125 m) outdoors, or 125 ft (40 m) indoors and is tagged with an ID number. Cradle transmits data at user-set intervals in different time slots according to the ID numbers in order to prevent data collision between two or more cradles. Cradle features audible alarm and serial communication. **Note:** One cradle is required for each datalogger used.

What's included: one 3.6 V lithium battery and 110 VAC adapter. Each cradle has one port for optional external sensor.

Catalog number	Description	
WD-35710-20	Datalogger cradle	

#### **C** Wireless (RF) Receiver and Software

Wireless receiver connects to monitoring station PC with range of 400 ft (125 m) outdoors, or 125 ft (40 m) indoors. MicroLab Plus™ software serves as a color-coded interface showing the status of up to 200 loggers total, six on one screen. Use it to store data or set up logger ID, alarm levels, or sampling rate (once per minute to once per hour). Display temperature, humidity, and low battery—easy-to-read graphics let you know if any logger is in alarm condition or not.

**What's included:** MicroLab Plus software, serial communications cable (purchase optional USB communication cable separately below), and one 110 VAC adapter.

Catalog number	Description
WD-35710-35	Wireless (RF) receiver and software
110 03/10 03	VVII CIC33 (III / I CCCIVCI alia 301tVVai C

#### **Accessories**

WD-35710-30 Antenna helps to strengthen reception

WD-35710-69 USB communication cable

WD-35710-63 Replacement cradle AC adapter, 110 VAC

WD-35710-64 Cradle AC adapter, 220 VAC

WD-35710-67 Replacement serial communications cable

WD-35710-80 Replacement receiver AC adapter, 110 VAC

WD-35710-61 Receiver AC adapter, 220 VAC

**External Sensors** log temperature, mA, voltage, pH, or activation of a contact closure. See page 28 for further specifications.

Catalog number	Description
WD-35710-70	Temperature probe, -60 to 212°F; 3¼"L x ¼" dia; 6-ft cable
WD-35710-72	Current sensor, 0 to 20 mA
WD-35710-74	Voltage sensor, 0 to 10 V
WD-35710-76	Contact closure sensor, open/close
WD-35710-78	pH adapter, 0 to 14 pH. pH electrode with BNC required

# CALIBRATION V





# **NIST-Traceable Calibration Reports**



InnoCal®, service provider for Oakton Instruments, is pleased to offer innovative solutions to satisfy your calibration and repair needs. Trust InnoCal to provide the documentation required to meet ISO, FDA, USDA, EPA, GLPs/GMPs, and other quality standards. Have equipment tested to ensure its accuracy or serviced to maintain optimal performance today!

#### **NIST-Traceable Calibration Certificates**

Order the catalog numbers listed on page 31 to have calibration reports provided with your new equipment purchase or schedule this service on previously purchased instruments by requesting a return authorization (RA) number.

Our detailed reports identify the instrument by model number, serial number, and company name. "As found/as left" test data, test procedures, calibration date, and technician number are also included.

#### Repair Service

Keep valuable equipment up and running with scheduled preventive maintenance and repair. Our experienced Service Technicians are factory trained on instrumentation theory and operation, and stay up to date on the latest product modifications.

All Metrology services are performed in an ANSI/ISO/IEC 17025:2005 accredited laboratory. Calibration reports are NIST-traceable unless otherwise stated. Accredited reports with calculated uncertainty measurements by test point are also available for many instrument parameters. Please contact us at 888-4oakton for details.



#### Calibration Traceable to NIST

Our commitment to quality and to the science of metrology is demonstrated by our utilization of highly trained, experienced metrologists using some of the most advanced methods and standards available. We provide you with the documentation you need to meet your most stringent quality requirements for the control of inspection, measuring, and test equipment. We will certify your new or existing instrument traceable to NIST standards.

#### **Calibration Report with test data, including:**

- description and identification of the item
- ▼ condition of the item as received
- ▼ identification of calibration procedure
- ▼ calibration date
- ▼ as found/as left test data
- ▼ electronic signature of technician
- statement of estimated uncertainty
- ▼ test uncertainties (TURs)
- ▼ list of standards used to perform calibration (including their calibration dates)

With today's high quality standards such as ISO 9000, calibration is becoming increasingly important. Traceability is not a timeless condition. It must be verified and maintained over the life of the instrument to ensure the highest accuracy possible. When you have your calibration done by InnoCal, we will send you an automatic reminder when it is time to recalibrate your instrument.



#### **Specialists in Instrument Calibration and Repair**

#### Highest Quality...

Lab is accredited to ANSI/ISO/IEC 17025:2005 by the American Association for Laboratory Accreditation (A2LA).



#### Fast Service...

Most instruments serviced in five business days!

#### Excellent Value...

Extensive test data on a broad range of measurement parameters without breaking the bank!

#### Reliable Support...

FAX Toll Free: 1-866-433-6684 or 1-281-359-0084

Factory-trained technicians provide free diagnostic support and troubleshooting advice.





# **▼** CALIBRATION







#### **NIST-Traceable Temperature Reports**

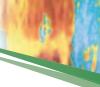
Thermometry type	Certification test points' against NIST-traceable standards	Instrument Catalog number	Probe Catalog number	System (meter + probe) Catalog number
J thermocouple	Four test points at 0, 100, 230, 410°C (32, 212, 446, 770°F)	WD-17000-10	WD-17001-10	WD-17002-10
K thermocouple	Four test points at 0, 100, 230, 410°C (32, 212, 446, 770°F)	WD-17000-12	WD-17001-12	WD-17002-12
T thermocouple	Four test points at -20, 0, 100, 230°C (-4, 32, 446, 770°F)	WD-17000-02	WD-17001-02	WD-17002-02
E thermocouple	Four test points at 0, 100, 230, 410°C (32, 212, 446, 770°F)	WD-17000-14	WD-17001-14	WD-17002-14
RTD	0, 100, 165, 230°C (32, 212, 329, 446°F)	WD-17000-04	WD-17001-04	WD-17002-04
Thermistor	Three test points at 0, 40, 70°C (32, 104, 158°F)	WD-17000-06	WD-17001-06	WD-17002-06
Infrared	50, 100, 200, 230°C (122, 212, 392, 446°F)	WD-17004-00	WD-17004-10	WD-17004-20

<sup>&#</sup>x27;If instruments and/or probes cannot achieve the listed temperature, InnoCal will substitute other test points at our discretion.

#### **Additional NIST-Traceable Reports**

NIST-traceable report for:	Certification test points	Catalog number
General		
Recorder, chart	Ten to fourteen test points (depends on range of recorder) volts (AC/DC) and amps (AC/DC)	WD-17100-00
Recorder, X-Y	Ten to fourteen test points (depends on range of recorder) volts (AC/DC) and amps (AC/DC)	WD-17100-10
Recorder, temperature	Use temperature certification catalog numbers from temperature table above	_
Timer/Stopwatch	Test data supplied in average seconds/day	WD-17060-00
Temperature		
Temperature datalogger	Three test points across range	WD-17002-20
Temperature transducer/transmitter	0.5°C or worse accuracy	WD-17101-36
	Better than 0.5°C accuracy	WD-17103-08
Handheld digital indicator	Four test points across range, -80 to 150°C (-112 to 302°F)	WD-17101-61
Scanning thermometer, 12-channel	Simulation temperature to mV or $\Omega$	WD-17103-00
	Four temperature test points with probes, –80 to 1000°C (–112 to 1832°F)	WD-17103-12
Scanning thermometer, 24-channel	Simulation temperature to mV or $\Omega$	WD-17103-02
	Four temperature test points with probes, –80 to 1000°C (–112 to 1832°F)	WD-17103-24
Hart®-style PRT	Per manufacturer's specifications	WD-17001-11
Temperature bath	Per manufacturer's specifications	WD-17001-13
Humidity/Temperature		
Thermohygrometer, handheld or benchtop	Three humidity test points (30, 60, and 80% RH) and one temperature test point at ambient (22 to 25°C)	WD-17030-20
Datalogger	_	WD-17030-24
Recorder	_	WD-17030-26
Digital/dial indicator	_	WD-17030-28

www.novatech-usa.com FAX Toll Free: 1-866-433-6684 or 1-281-359-0084



31



# **More Products from Oakton Instruments**





# ▼ INDEX

WD-07549-9923	WD-08505-569	<b>WD-17002-04</b> 31	<b>WD-35710-50</b> 28
WD-08113-6513	WD-08505-579	WD-17002-0631	WD-35710-6028
<b>WD-08116-65</b> 13	WD-08505-6113	WD-17002-1031	<b>WD-35710-61</b> 29
<b>WD-08117-65</b> 13	WD-08505-6213	WD-17002-1231	<b>WD-35710-62</b> 28
<b>WD-08117-70</b> 18	<b>WD-08505-63</b> 13	<b>WD-17002-14</b> 31	<b>WD-35710-63</b> 29
<b>WD-08117-72</b> 18	WD-08505-8512	<b>WD-17002-20</b> 31	<b>WD-35710-64</b> 29
<b>WD-08117-73</b> 18	<b>WD-08505-86</b> 12	WD-17004-0031	<b>WD-35710-65</b> 28
<b>WD-08117-74</b> 18	<b>WD-08505-87</b> 12	<b>WD-17004-10</b> 31	<b>WD-35710-67</b> 29
<b>WD-08117-75</b> 18	<b>WD-08506-75</b> 12	WD-17004-2031	<b>WD-35710-69</b> 29
<b>WD-08117-80</b> 18	WD-08512-8112	WD-17030-2031	<b>WD-35710-70</b> 28
<b>WD-08117-85</b> 18	<b>WD-08512-82</b> 12	WD-17030-2031	<b>WD-35710-70</b> 29
<b>WD-08117-87</b> 18	<b>WD-08512-83</b> 12	WD-17030-2031	<b>WD-35710-72</b> 28
<b>WD-08117-89</b> 18	<b>WD-08514-86</b> 13	WD-17030-2431	<b>WD-35710-72</b> 29
WD-08117-9018	WD-08516-559	WD-17030-2631	WD-35710-7428
WD-08439-609	WD-08516-6012	WD-17030-2831	WD-35710-7429
WD-08439-629	WD-08516-6013	WD-17060-0031	WD-35710-7628
WD-08439-649	WD-08516-6213	WD-17100-0031	WD-35710-7629
WD-08439-7011	WD-08516-6412	WD-17100-1031	WD-35710-7828
WD-08439-7211	WD-08516-6510	WD-17101-3631	WD-35710-7829
WD-08439-7411	<b>WD-08516-75</b> 10	WD-17101-6131	WD-35710-8029
WD-08439-8010	WD-08516-7513	WD-17103-0031	WD-39642-0025
WD-08439-8210	<b>WD-08517-55</b> 9	WD-17103-0231	WD-85000-006
WD-08439-8410	WD-08517-6012	WD-17103-0831	WD-85000-0217
<b>WD-08439-90</b> 10	WD-08517-6013	WD-17103-1231	WD-85000-0624
<b>WD-08439-92</b> 10	<b>WD-08517-62</b> 13	WD-17103-2431	WD-90003-0024
<b>WD-08439-94</b> 10	WD-08517-6412	WD-35426-0021	WD-93000-007
WD-08466-0212	WD-08517-6510	WD-35426-2016	WD-93600-029
WD-08466-0412	WD-08517-7510	WD-35426-5020	WD-93600-0213
WD-08466-0612	WD-08517-7513	WD-35426-6015	WD-93600-229
WD-08466-8112	WD-08517-9012	WD-35427-005	WD-93600-2213
WD-08466-8212	WD-08518-5012	WD-35427-105	WD-93600-429
WD-08466-8312	WD-08518-6012	WD-35427-105	WD-93600-4213
WD-08469-8013	WD-08518-7012	WD-35427-404	WD-93601-0210
WD-08469-8213	WD-08519-5012	WD-35427-503	WD-93601-0213
WD-08469-8413	WD-08519-5012	WD-35427-803	WD-93601-0410
WD-08491-0223	WD-08519-5212	WD-35427-8021	WD-93601-0413
		WD-35427-853	WD-93601-0610
WD-08491-0323 WD-08491-0423	WD-08519-8613		WD-93601-0613
WD-08491-0523	WD-08525-8613	WD-35427-8521 WD-35625-4027	WD-93601-2210
	WD-08541-0612		
WD-08491-0623	WD-08541-0912	WD-35625-4527 WD-35626-0022	WD-93601-2410
WD-08491-0723	WD-08541-1212		WD-93601-2610
WD-08491-0923	WD-08541-1612	WD-35626-1024	WD-93601-4210
WD-08491-1023	WD-08541-2012	WD-35626-1025	WD-93601-4410
WD-08491-1123	WD-08541-2512	WD-35626-2017	WD-93601-4610
WD-08491-1323	WD-17000-0231	WD-35627-006	WD-93607-2013
WD-08491-1423	WD-17000-0431	WD-35627-807	WD-93607-2213
WD-08491-1523	WD-17000-0631	<b>WD-35629-50</b> 26	<b>WD-93607-24</b> 13
WD-08491-1623	WD-17000-1031	WD-35629-9026	WD-93756-039
WD-08500-559	WD-17000-1231	WD-35639-0026	WD-93756-049
WD-08500-6012	WD-17000-1431	WD-35639-2026	WD-93756-239
WD-08500-6013	WD-17001-0231	<b>WD-35639-30</b> 26	<b>WD-93756-24</b> 9
<b>WD-08500-62</b> 13	WD-17001-0431	<b>WD-35639-40</b> 26	<b>WD-93756-44</b> 9
WD-08500-6412	WD-17001-0631	<b>WD-35710-00</b> 28	<b>WD-93756-63</b> 9
<b>WD-08500-65</b> 10	WD-17001-1031	<b>WD-35710-10</b> 28	<b>WD-93824-00</b> 19
<b>WD-08500-75</b> 10	WD-17001-1231	<b>WD-35710-20</b> 29	<b>WD-93824-12</b> 19
<b>WD-08500-75</b> 13	WD-17001-1431	<b>WD-35710-30</b> 29	<b>WD-93824-30</b> 19
<b>WD-08505-55</b> 9	<b>WD-17002-02</b> 31	<b>WD-35710-35</b> 29	

# PREDICTING A CHANGE IN **TEMPERATURE.**

#### LOOK WHAT'S NEW FROM OAKTON!

# We are pleased to announce our vastly expanded range of temperature measurement products, including:

#### • Temp 10 Series Handheld Meters (see pages 5, 16, and 21)

The Oakton Temp 10 Series offers simple, accurate temperature measurement. Couple these meters with our wide selection of probes—thermocouple, RTD, or thermistor—to create the temperature measurement system you need. Great features like backlit display, optional rubber armor, and our "three-way, hands-free" system make the Temp 10 series a great deal!



#### • Temp 100 Handheld Meter (see page 4)

Dual-input capability and the ability to accept type J, K, T, or E thermocouple type probes make this meter extremely versatile. Displays both channels simultaneously along with differential; great for monitoring variances. Data storage for 1000 points lets you track critical results and review them later. As with the Temp 10 series, you get a backlit display, optional rubber armor, and our "three-way, hands-free" system.



#### • Temp 300 Series Meters (see pages 3, 15, and 20)

Our most advanced meter yet! With memory for 10,000 data points and USB output, the 300 series provides a reliable, portable, data acquisition tool. With the optional rugged, rubber armor and easy-to-read, backlit display, you can use the 300 series almost anywhere.



#### **ORDER FROM:**



800 Rockmead Dr Ste 102 • Houston, TX 77339-2496 Tel: (281) 359-8538 • Toll Free Tel: (866) 433-6682 Fax: (281) 359-0084 • Toll Free Fax: (866) 433-6684 sales@novatech-usa.com • www.novatech-usa.com





Oakton® 2008 CATALOG A9. Printed in the U.S.A. Oakton TM Reg. #1,692,543. We reserve the right to make changes, improvements and modifications to products shown. Oakton Instruments are available only through authorized Oakton distributors.